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ILLINOIS CORN PERFORMANCE TESTS . . . 1940



University of Illinois • Agricultural Experiment Station

Bulletin 474

In cooperation with the Division of Cereal Crops and Diseases, Bureau of Plant Industry, U. S. Department of Agriculture, and the Illinois State Natural History Survey

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Seventh Annual Illinois Corn Performance Tests 1940

By R. R. COPPER, G. H. DUNGAN, A. L. LANG, J. H. BIGGER,
BENJAMIN KOEHLER, and OREN BOLIN¹

OF THE 7,551,000 acres of corn in Illinois in 1940, 77 percent or 5,814,270 acres was planted to hybrids. This is the largest acreage of hybrid corn on record in the state. The extensive use of hybrids was responsible for a relatively high state average yield, 44 bushels an acre, in spite of a shortage of moisture in many important corn-growing areas. The average yield for the previous ten years was 36 bushels an acre.

SCOPE OF THE TESTS

Three hundred eighty-six hybrids and 26 open-pollinated varieties were included on twelve Illinois corn-performance test fields in 1940, the largest number of hybrids ever entered in the Illinois test. Sixty-seven companies and individuals entered hybrid seed, and twenty-five companies and individuals furnished seed for the open-pollinated varieties.

Two new testing fields were included, one at Mt. Pulaski in Logan county and the other at Greenfield in Greene county. Five fields in the north-central and central sections of the state had 75 entries each. The other fields had 60 entries each, except Albion, which had only 53. Six open-pollinated varieties were used on the Albion field as a check; 5 were used on each of the other fields. Because of the number of producers desiring to submit seed, it was necessary to limit the number of kinds each could enter.

Seed samples were obtained directly from the warehouses of the producers entering the corn, except in a few instances where small quantities were shipped to the Experiment Station by the producers. These small samples and all samples taken from less than five different bushel lots are marked with an asterisk (*) in the tables.

Records were made of total yield, sound yield, percent of moisture in grain at harvest, lodging resistance, and soil adaptability. On the Round Lake field and the Kings field a moisture test was made a little over a week after the first killing frost.

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SOIL CHARACTERISTICS OF FIELDS

The fields chosen for the 1940 tests were, on the whole, medium to high in productivity. In locating a field, effort was made to select a soil type that occurs extensively in the region represented by the field. Furthermore care was taken to have each field as nearly uniform as possible, both in soil type and in drainage conditions. However, at Reddick the surface soil was alkaline in reaction, and the texture varied from sandy silt loam to clay loam. At Paxton the depth to

Table 1.—GENERAL INFORMATION: Illinois Cooperative Corn Performance Tests, 1940

Location of field	County	Cooperator	Number of entries	Date planted	Date harvested	Average acre-yield all entries	
						Total	Sound
NE—Round Lake...	Lake.....	Joseph Wiser.....	60	May 24	Nov. 15	<i>bu.</i>	<i>bu.</i>
N—Kings.....	Ogle.....	Elmer Hayes.....	60	May 18	Nov. 8	74.1	72.1
WNC—Cambridge....	Henry.....	Earl Collis.....	75	May 16	Nov. 7	101.9	92.4
ENC—Reddick.....	Kankakee....	Thomas Jenson.....	75	May 11	Oct. 21	86.8	83.6
WC—Littleton.....	Schuyler.....	Ira Burnham.....	75	May 13	Oct. 24	77.7	76.6
C—Mt. Pulaski....	Logan.....	James Cowan.....	75	May 21	Oct. 29	82.3	81.4
EC—Paxton.....	Ford.....	Arthur Stevenson....	75	May 14	Oct. 22	62.8	61.7
ESC—Sullivan.....	Moultrie....	Masonic Home Farm, Monroe Wilson, Mgr...	60	May 14	Oct. 31	55.3	54.0
WSC—Greenfield....	Greene.....	Glenn Smith.....	60	May 21	Oct. 30	70.9	70.1
S—Shobonier.....	Fayette.....	Henry Opfer.....	60	May 18	Nov. 18	83.0	82.4
SE—Albion.....	Edwards.....	Elmer and Robert Hortin	53	May 22	Nov. 12	26.2	25.1
SW—Modoc.....	Randolph....	Bernard Naeger.....	60	May 9	Oct. 17	75.3	74.5
						69.0	68.5

unleached compact glacial till was variable. The south half of the testing field at Shobonier was a "slick spot."

The approximate location of the twelve test fields is shown by the map on page 177. General information on soil characteristics and soil-management practices is indicated in Table 2.¹

METHOD OF PLANTING

In order that the trials might be carried on under actual farm conditions, the test plots were located within a larger cornfield. The test plot was planted by hand on the day the rest of the field was planted. The rows of the test plot were joined with those of the surrounding corn so they could be cultivated with the rest of the field.

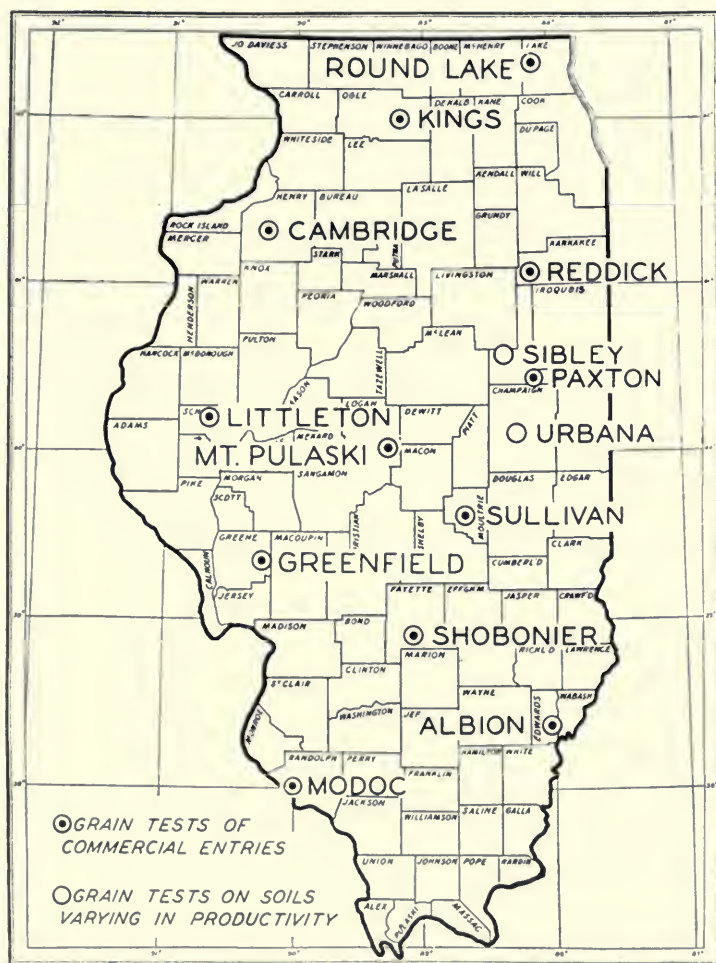
On all but the Modoc field each entry (variety or hybrid) was planted in 10 plots, each plot being 12 hills long and 2 rows wide. At

¹HERMAN WASCHER, Assistant Chief in the Soil Survey, determined the soil type, uniformity, and physical characteristics of each field. H. J. SNIDER, Assistant Chief in Soil Experiment Fields, made the chemical analyses.

Modoc 30 of the 60 entries were planted in 8 plots and 30 were planted in 7 plots.

All plots were planted 3 kernels to a hill, and the only correction made for imperfect stand was to adjust the yields for missing hills. All seed was treated with organic mercury dust before planting.

Entries were arranged in controlled random order. With the



Location of 1940 test fields

Twelve fields, distributed so as to represent the more important climatic areas of the state, were used in the 1940 general-performance tests; two others, Sibley and Urbana, were used for soil-adaptability tests. All these fields were, on the whole, medium to high in productivity.

Table 2.—TESTING FIELDS: Soil Characteristics and Management Practices

a—Surface color and drainage b—Subsoil texture, and underdrainage	pH values Surface	Organic matter Surface	Total nitrogen Surface	Nitrate nitrogen Surface	Available phosphorus Surface	Available potassium Surface	Previous crops and soil management
Northeastern							
<i>Round Lake—Drummer silty clay loam (tentative)</i>		<i>perct.</i>	<i>lbs.</i>	<i>lbs.</i>	<i>lbs.</i>	<i>lbs.</i>	
a—Black, moderately slow.....	7.8	8.92	9400	45	60	300	Oats 1937, corn 1938, soy 1939; manured 1939. S plowed.
b—Silty clay loam, moderate.....							
Northern							
<i>Kings—Tama silt loam</i>							
a—Light brown, moderately rapid....	5.0	4.66	4600	70	40	300	Soybeans (hay) 1937, corn oats (sweet clover) limed 1939, manured Spring plowed.
b—Silty clay loam, moderate.....							
West north-central							
<i>Cambridge—Muscatine silt loam</i>							
a—Brown, moderate.....	4.8	6.01	5920	140	45	530	Oats 1937, red clover 1938 1939; manured 1938. S plowed.
b—Silty clay loam, moderate.....							
East north-central							
<i>Reddick—Rensselaer loam (tentative)</i>							
a—Dark brown, moderate.....	8.0	5.15	5760	50	75	185	Corn 1937, oats 1938, a clover and alfalfa p 1939; limed 1938, rock phate 1938. Fall plow
b—Clay loam, moderate.....							
West-central							
<i>Littleton—Ipava silty clay loam to clay loam</i>							
a—Black, moderately slow to slow...	5.0	3.98	4200	30	190	350	Wheat 1937, mammoth 1938, corn 1939; limed Spring plowed.
b—Clay loam, moderate.....							
Central							
<i>Mt. Pulaski—Sable silty clay</i>							
a—Black, slow.....	5.2	4.82	5400	20	220	300	Wheat 1937, red clover corn 1939. Spring pl
b—Silty clay, moderate.....							
East-central							
<i>Paxton—Elliott clay loam</i>							
a—Black, slow.....	5.4	4.90	5280	30	50	370	Oats 1937, sweet-clover red-clover pasture 1938 1939; manured 1938. plowed.
b—Clay loam, moderately slow.....							
East south-central							
<i>Sullivan—Flanagan silt loam (light)</i>							
a—Brown to light brown, moderate...	5.8	3.90	4280	60	18	250	Sweet-clover and timothy ture 1937, 1938, corn limed 1938. Fall plow
b—Silty clay loam, moderate.....							
West south-central							
<i>Greenfield—Ipava silt loam (tentative)</i>							
a—Brown, moderate.....	5.0	4.21	4000	80	300	260	Alfalfa 1936, 1937, 1938, 1939; manured 1939, limed 1928, 1935, rock phate 1940. Spring pl
b—Silty clay, moderate.....							
Southern							
<i>Shobonier—Cine silt loam (slick spots)</i>							
a—Gray, slow.....	5.0	2.28	2360	16	40	70	Oats 1937, corn 1938, v 1939; limed 1932. S plowed.
b—Clay, very slow.....							
Southeastern							
<i>Albion—Patton silty clay loam (light)</i>							
a—Brownish gray, slow.....	5.2	3.82	4000	30	130	300	Corn 1937, wheat 1938, v clover 1939. Fall plow
b—Silty clay loam, moderately slow..							
Southwestern							
<i>Modoc—Beaucoup clay loam, bottom</i>							
a—Drab, moderately slow.....	6.6	3.10	3000	40	520	750	Corn 1937, wheat 1938, clover and sweet clover Fall plowed.
b—Clay loam, moderately slow.....							

Soil samples collected June 3, 4, 6, and 7, 1940.

few exceptions indicated in the tables of results, all plots of each entry were harvested.

SEASONAL CONDITIONS

Growing conditions in 1940 were more favorable at Round Lake in northeastern Illinois and at Kings in northern Illinois than on any of the other corn-performance fields.

Temperatures during May were a little below average, but during the rest of the year temperatures were favorable for corn. An abundance of rain in the northern part resulted in good corn yields and caused the grain to carry a relatively high amount of moisture at harvest. Grain samples were taken on the Kings and Round Lake fields on October 8 and 9 respectively in order to determine the condition of the corn about a week after the first killing frost.

The Cambridge field in west north-central Illinois received about the right amount of rainfall until the last half of August and all of September, when lack of moisture caused considerable injury. The Reddick field in the east north-central section became dry even earlier, and some firing of the lower leaves resulted.

With the exception of the fields at the northern end of the state, the best distribution of rainfall occurred on the Littleton field. The corn on the Mt. Pulaski field in central Illinois and on the Paxton field in the east-central area, which started off nicely, was injured considerably by drouth during the first half of August.

The potential yield of the field at Greenfield was greatly reduced by lack of moisture from mid-June to the second week in August. The hybrids that matured late were even more severely injured than those that matured early. The Sullivan field withstood the drouth; by the middle of September signs of moisture shortage were clearly evident, but yields were not greatly reduced.

The Shobonier field in southern Illinois suffered greatly from early drouth. The plants were so badly stunted that they were not able to recover after the rains of mid-August. A deficiency of potassium and perhaps also of nitrates aggravated the situation on this field.

The Albion field in southeastern Illinois also suffered from early drouth, and leaf firing appeared early. The amount of firing was more than normal, and may have been caused by close planting since the hills were only 3 feet apart each way. In spite of an evident moisture deficiency during a large part of the growing season, the yields from the Albion field were good.

At Modoc in southwestern Illinois there was enough moisture during most of the season to keep the corn growing vigorously. Silking and tasseling occurred earlier at Modoc than at any of the other corn-performance fields.

INSECT PROBLEMS

The season of 1940 presented several insect hazards for corn. The first to attract attention was the attack of the seed-corn maggot, *Hylemyia cilicrura* Rond. This insect, always present in Illinois, damages corn seed when the corn lies ungerminated in the soil or when it germinates very slowly. The cold wet ground at planting time in 1940 delayed the germination of the seed and a great deal of damage resulted. Many farmers found it necessary to replant their fields. It is possible that factors other than the cold wet ground may have been partly responsible for the slow germination and for the consequent losses that were incurred from the seed maggot attack. There was no conclusive evidence that some hybrids are more susceptible than others to damage by the seed-corn maggot, altho hybrids that germinate slowly are probably more susceptible. The performance fields were not seriously affected.

The grape colaspis, *Colaspis brunnea* (F.) was present in great abundance in many Illinois cornfields where corn followed clover, soybeans, and lespedeza. In some places soybean stands were reduced as much as 50 percent, and many fields of corn had to be replanted because of an attack by this insect. There was, however, no particular evidence of the grape colaspis on the performance fields.

There was a threat of chinch bugs, *Blissus leucopterus* (Say), in the early part of the season but they caused very limited damage. They did not affect the performance fields to any considerable extent.

The test fields at Cambridge and Albion were affected to a measurable extent by corn rootworms. The average amount of lodging of hybrids on these two fields was 40.9 and 35.7 percent respectively. (Plants are considered lodged when they lean 30 degrees or more from the perpendicular, this leaning extending to and including the roots.) Examination of other performance fields showed that rootworm damage occurred, but environmental conditions were such that no lodging resulted. Two rootworms, the corn rootworm, *Diabrotica longicornis* (Say), and the southern corn rootworm, *Diabrotica duodecimpunctata* (Fab), were present and contributed to root damage which resulted in the ultimate damage recorded.

DISEASE PREVALENCE

Smut and ear rots were the principal diseases attacking Illinois cornfields in 1940. Only traces of Stewart's disease were seen. Diplodia stalk rot developed only moderately and came too late in the season to decrease yields, but it was no doubt a factor in late-season stalk breaking. There was much lodging from stalk breaking that was not caused by disease, so far as could be ascertained; the

healthy tissues of many of the varieties and hybrids were softer than usual, so that the stalks kinked and fell over easily. Some of the crosses carrying inbred L317 were especially weak in this respect.

Smut. About 4 percent of the 1940 corn crop in Illinois was lost because of smut, as estimated by the authors and by the Illinois State Natural History Survey. This is about twice the average loss. Most of the smut galls in 1940 were located at the ear or at nodes below the ear. Smut above the ear and in the tassel was rare.

Analysis of 1940 data on smut occurrence in single crosses in two fields at Urbana and one at Wyoming showed a negative correlation between smut and yield in each case. This agrees with data obtained by M. T. Jenkins on crosses in Iowa some years ago, and means that in general in years of severe smut occurrence the greater the prevalence of smut in a cross the lower the yield. Of the inbreds that made up these single crosses, 38-11 was the worst in introducing smut-susceptibility, and was followed by WF9, P8, 187-2, and Pr. Among the more resistant inbreds were L317, K4, Kys, 5120, R4, and 28. It is possible that under different growing conditions these rankings might be changed somewhat.

Ear rots. The average kernel damage from rot on all twelve of the corn-performance test fields in 1940 was 2.57 percent; in 1939 it



Smut caused serious reduction in corn yields in 1940

This disease occurred most commonly at nodes below the ear (*left*) and on the ear (*right*). Often the entire ear was converted to smut.

was only 1.68 percent for all fields. This increase was due for the most part to the large amount of ear rot in the two northern fields located at Kings and Round Lake. This area received considerable rain in the late summer, whereas rainfall in most of the remainder of the state was below average during that time.

Diplodia was the principal cause of ear rot in the northern end of the state, where ear rot was most severe. In the remainder of the state Fusarium rot appeared to be the most prevalent.

No advance toward better ear-rot resistance appears to have been made in most of the hybrids that are now in general commercial production. Altho observations have appeared in print stating that the quality of corn has been better during the last few years because more hybrid corn is being grown, the data from the performance tests do not altogether support this view. Either five or six entries of open-pollinated corn were included on each of the twelve performance fields. When the percentage of damaged kernels was averaged separately for all the open-pollinated entries and for all the hybrid entries, the hybrids averaged higher in ear-rot damage on 7 fields, the open-pollinated were higher on 4 fields, and the two were equal on the twelfth field.

Some individual hybrids, of course, have much greater resistance to ear rots than others; the two-, three-, four- and five-year summaries give more reliable data for comparing individual hybrids than do the one-year tables.

MEASURING PERFORMANCE OF ENTRIES

The entries in 1940 were rated, as they were each year since 1935, on the basis of two measures of performance—erect plants at harvest (lodging resistance) and yield of sound corn.

Erect plants. The percentage of erect plants in each entry on each field was estimated at the time of harvest. The *rating* for erect plants of an entry is the ratio of erect plants of that entry to the average number of erect plants on the field, multiplied by 100.

There were three types of lodging on the test fields—that due to rootworm damage, to broken stalks just below the ear, and to broken stalks toward the base of the plant.

Sound corn. To determine shelling percentage, the entire yield from one replicate of each entry was shelled. From this shelled corn one sample was taken to determine the percentage of moisture at harvest, and another to determine the percentage of damaged kernels, by weight. The moisture determinations were made with a Tag-Heppenstall moisture meter. The percentage of damaged corn was determined according to the federal grain standards.

The total acre-yield was calculated as shelled corn carrying 15.5 percent moisture, the upper limit allowable for No. 2 corn. The yield of sound corn was computed by deducting the amount of damaged corn from the total yield.

The rating on sound yield is the ratio, expressed as percentage, of the yield of sound corn for that entry to the average yield of sound corn for all the entries on the field.

General performance. In computing the general-performance rating of an entry, the ratings for erect plants and sound corn were averaged, but the sound-corn rating was given three times the weight of the rating for erect plants. When two or more entries tied in the general-performance rating, the ties were given the same numerical ranking, but they were listed in the order of their descending yield of sound corn. If the two entries had the same yield of sound corn, then they were listed on the basis of total corn.

Chance differences. Too much confidence must not be placed in the exact ranking of a hybrid in the following tables, for chance has played a part in determining the placing of many of them. Unmeasured differences in soil and in prevalence of insects and diseases, and unaccountable variability in stand will cause differences in yield that are not inherent in the hybrids or varieties.

The part played by chance in the 1940 tests has been calculated by the mathematical procedure known as "analysis of variance." At the bottom or side of each table is stated the approximate difference which there must be in the 1940 yields to show a true inherent difference between any two entries. Unless this difference exists there is no assurance that one entry is inherently higher yielding than the other.

Readers are urged to note the difference necessary for significance, as shown for each test field, and to keep that difference constantly in mind in all comparisons of entries on that field.

DISCUSSION OF 1940 TEST

The results of the 1940 corn-performance test brought out some marked differences in hybrids. The year 1940 was not so favorable for corn production as were 1937, 1938, and 1939. In order to perform as consistently as they did, hybrids had to exhibit more resistance to drouth, wind, disease, and insects than in the three years previous. Because of the wind on November 11, the lodging resistance on the Round Lake and Albion fields was important in determining the general-performance rating of the entries on these fields; and in general the entries with the greatest number of standing stalks ranked near the top. Usually the lodging of the hybrids was due to stalk breaking; the open-pollinated varieties went down because of root weaknesses.

Superiority of hybrids. Hybrids were definitely superior to the open-pollinated varieties on all of the fields in the 1940 test. On the Kings, Cambridge, Paxton, and Greenfield test fields the 5 best hybrids exceeded by over 37 bushels an acre the sound yield of the 5 open-pollinated varieties. With the exception of the Littleton field, the 5 poorest hybrids on every field were superior in sound yield to the average of the 5 open-pollinated varieties on the same field. The 5 best hybrids and the 5 poorest hybrids had greater lodging resistance than the average of the 5 open-pollinated varieties on every test field except Round Lake and Albion. On these two fields the 5 poorest hybrids did not stand as well as the open-pollinated varieties. For a complete comparison of the 5 best hybrids and the 5 poorest hybrids with the open-pollinated varieties see Table 3.

With few exceptions the white hybrids that were entered in the test were inferior to the yellow hybrids. Much of the poor performance of the white hybrids was due to the large number of barren stalks. Barrenness also contributed to the poor performance of many of the yellow hybrids but it was not as marked in them as in the white hybrids. Barrenness was the greatest single cause of yield differences on the Paxton field.

Maturity. This year's test was the first in several years in which moisture content at harvest was an indication of maturity. The Round Lake and Kings fields were particularly high in moisture, considering the lateness of harvest.

In order to obtain a better indication of the maturity of the entries on the Kings and Round Lake fields, samples were taken from these fields on October 8 and October 9 respectively. One hill containing at least two plants was harvested from each of four replications. Two

Table 3.—Average of Yields of Five Best Hybrids and Five Poorest Hybrids Compared With Open-Pollinated Varieties: 1940 Test Fields

Field	Sound yield					Lodging resistance				
	Five best hybrids	Five poorest hybrids	Five open-pollinated var.	Superiority of 5 best hybrids over o.p.	Superiority of 5 poorest hybrids over o.p.	Five best hybrids	Five poorest hybrids	Five open-pollinated var.	Superiority of 5 best hybrids over o.p.	Superiority of 5 poorest hybrids over o.p.
	bu.	bu.	bu.	bu.	bu.	perct.	perct.	perct.	perct.	perct.
Round Lake.....	77.4	68.6	58.8	18.6	9.8	51.2	8.0	14.0	37.2	-6.0
Kings.....	106.8	78.7	56.4	50.4	22.3	97.6	97.8	80.0	17.6	17.8
Cambridge.....	97.5	72.1	59.6	37.9	12.5	95.8	94.4	76.8	19.0	17.6
Reddick.....	87.8	65.4	61.0	26.8	4.4	98.4	97.0	89.4	9.0	7.6
Littleton.....	91.8	72.2	74.5	17.3	-2.3	99.6	100.0	96.4	3.2	3.6
Mt. Pulaski.....	70.5	54.3	53.8	16.7	.5	94.4	88.0	83.2	11.2	4.8
Paxton.....	70.7	31.8	29.9	40.8	1.9	95.8	89.4	70.8	25.0	18.6
Sullivan.....	80.5	59.2	54.8	25.7	4.4	99.6	98.8	97.0	2.6	1.8
Greenfield.....	99.5	70.1	56.9	42.6	13.2	99.0	98.2	92.4	6.6	5.8
Shobonier.....	29.6	21.6	21.2	8.4	.4	78.6	79.4	69.6	9.0	9.8
Albion.....	81.7	70.5	58.0*	23.7	12.5	43.0	19.6	28.0*	15.0	-8.4
Modoc.....	74.9	59.6	55.1	19.8	4.5	90.6	88.8	85.6	5.0	3.2
Average.....	80.7	60.3	53.3	27.4	7.1	87.0	72.4	73.6	13.4	7.1

*Average of 6 open-pollinated varieties instead of 5.

complete rows of kernels were removed from every ear harvested to obtain a sample for moisture. The percentage of moisture was obtained by drying 200 grams of the sample in an electric oven for 48 hours.

At Round Lake the moisture content of the samples ranged from 40.2 percent to 25.7 percent (Table 4) on October 9. The average for the 5 adapted open-pollinated varieties was 32.5 percent; and 14 hybrid entries had the same or a lower percentage of moisture. The average for the entire field on October 9 was 33.9 percent, and at harvest (November 15) it was 21.8 percent. The average of the open-pollinated varieties at harvest time was 23.2 percent; and 42 hybrid entries had the same or a lower percentage. The moisture content of the hybrids at harvest time ranged from 28.5 percent to 17.6 percent.

The above data from the Round Lake field indicate that after an early killing frost most hybrids dry out faster than the open-pollinated varieties. In general the hybrids which had the higher percentage of moisture on October 9 had the higher percentage at harvest, and the hybrids with the lower percentage of moisture on October 9 had the least moisture when harvested.

At Kings (Table 6) the situation was much the same as at Round Lake. The moisture content of the grain decreased more rapidly in most of the hybrids than in the open-pollinated varieties. On October 8 the percentage of moisture for all entries on the field ranged from 39.3 percent to 28.0 percent, while at harvest time it ranged from 27.3 percent to 19.6 percent. Eleven hybrids had the same or a lower moisture content than the average of the open-pollinated varieties on October 8; at harvest time 31 hybrids had the same or a lower percentage of moisture than the open-pollinated varieties.

Dropped ears. A count was made of the dropped ears on all of the 1940 test fields, but there were too few such ears to warrant the drawing of any conclusions.

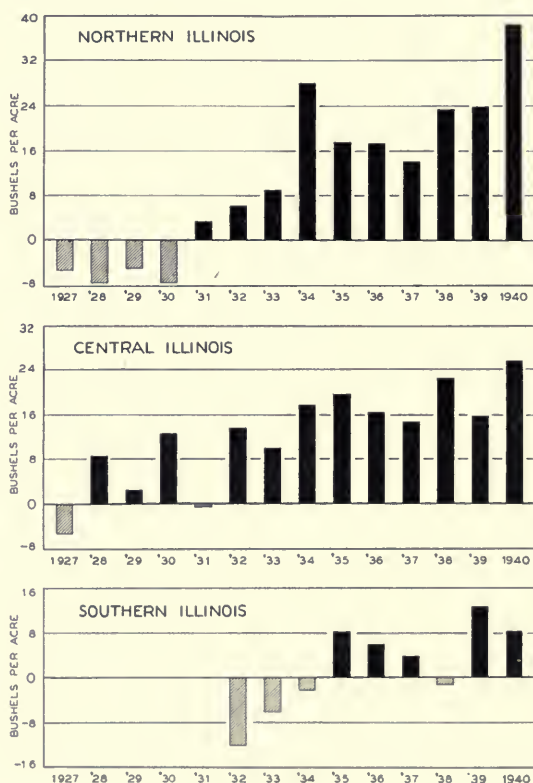
FIVE-, FOUR-, THREE-, AND TWO-YEAR SUMMARIES

A mistake to which all who are interested in hybrid corn are more or less prone is to evaluate a new entry on the results of a single year's test. No two seasons are exactly alike and a corn which does exceptionally well one year may perform quite differently under different seasonal conditions. Manifestly then, the more seasons during which a corn has been tested, the more certain a grower can be of its merit. For this reason summary tables including entries that have been in the tests for five to two years have been prepared.

Not many hybrids have been grown in these tests for as long as five years because most of the hybrids tested five years ago have been

discontinued. A hybrid that ranks well toward the top in the various summary tables and also shows a good performance in the current year's test is most assuredly a good one. The consistency of the general performance of an entry can be readily traced by studying the summary tables for each section of the state.

A good measure of the superiority of an entry is the amount by which it has exceeded the average of the open-pollinated varieties. If the hybrid exceeded the average of the varieties markedly year after year, it is to be preferred to hybrids with widely fluctuating seasonal yields even tho the average yield of the fluctuating hybrids may be somewhat higher.



Differences between yields of hybrids and open-pollinated varieties 1927-1940

The above bars show the amounts by which the yields of the five best hybrids have exceeded (*black*) or have fallen below (*crosshatch*) the five best open-pollinated varieties in three sections of Illinois.

PEDIGREES OF ILLINOIS AND U. S. HYBRIDS

Following is a partial list of Illinois and U. S. hybrids. The performance of those that are starred is shown in this bulletin.

Ill. 15....(WF9 x 38-11) (159L1 x 1224)	Ill. 504....(WF9 x L317) (R4 x Hy)
*Ill. 21....(WF9 x 38-11) (187-2 x Hy)	Ill. 507....(A x 90) (WF9 x R4)
Ill. 29....(A x 90) (R4 x Hy)	Ill. 511....(A x 90) (R4 x L317)
Ill. 48....(R4 x L317) (Hy x 4211)	Ill. 521....(A x 90) (Os420 x Os426)
Ill. 53....(WF9 x M14) (Pr x 1205)	Ill. 523....(A x 90) (WF9 x 4226)
Ill. 99....(CC5 x CC7) (WF9 x CC1)	Ill. 538....(5120 x 4211) (R4 x Tr)
*Ill. 101....(WF9 x M14) (CC7 x 187-2)	Ill. 543....(90 x Hy) (R4 x Tr)
Ill. 104....(CC5 x CC7) (A x Hy)	*Ill. 546....(WF9 x Hy) (R4 x Tr)
Ill. 107....(1198 x 38-11) (Tr x L317)	*Ill. 566....(187-2 x Hy) (K4 x L317)
Ill. 110....(38-11 x Kys) (Tr x L317)	Ill. 570....(A x 90) (Hy x 540)
Ill. 115....(5120 x Kys) (Tr x L317)	Ill. 571....(Tr x 90) (Hy x 540)
Ill. 117....(K4 x 38-11) (Tr x L317)	Ill. 582....(R4 x L317) (Hy x 540)
*Ill. 126....(WF9 x 38-11) (Tr x L317)	Ill. 586....(4226 x A) (Hy x 540)
Ill. 153....(WF9 x R4) (159L1 x 1224)	*Ill. 600....(187-2 x 38-11) (159L1 x L317)
Ill. 156....(Kys x 38-11) (Tr x R4)	Ill. 606....(R4 x Hy) (NI4 x 5120)
Ill. 161....(WF9 x 38-11) (Tr x R4)	Ill. 614....(701 x L317) (5120 x Tr)
Ill. 172....(R4 x Hy) (A x 540)	Ill. 710....(R4 x Hy) (Tr x L317)
*Ill. 200....(WF9 x 38-11) (K4 x L317)	Ill. 713....(WF9 x 38-11) (G x L317)
*Ill. 201....(WF9 x 38-11) (187-2 x L317)	*Ill. 751....(A x 90) (WF9 x Hy)
Ill. 205....(WF9 x 38-11) (159L1 x L317)	Ill. 762....(A x Hy) (R4 x L317)
*Ill. 206....(WF9 x 38-11) (5120 x L317)	Ill. 772....(R4 x Hy) (I159 x L317)
Ill. 208....(B2 x 38-11) (K4 x L317)	*Ill. 784....(Hy x 5120) (K4 x L317)
*Ill. 212....(WF9 x 38-11) (4-8 x 187-2)	Ill. 791....(A x 90) (L317 x 701)
Ill. 215....(5120 x 38-11) (187-2 x L317)	*Ill. 800....(5678 x Kys) (K4 x 38-11)
*Ill. 219....(CC5 x CC7) (WF9 x Hy)	*Ill. 801....(5120 x Kys) (K4 x L317)
Ill. 224....(Pr x 1205) (M14 x 90)	*Ill. 802....(38-11 x 5678) (K4 x L317)
Ill. 227....(WF9 x 38-11) (Hy x Tr)	*Ill. 804....(5120 x 38-11) (K4 x L317)
Ill. 236....(Os420 x Os426) (WF9 x L317)	*Ill. 805....(187-2 x 38-11) (K4 x L317)
Ill. 240....(WF9 x K4) (Hy x 5120)	*Ill. 806....(38-11 x 187-2) (K4 x Kys)
Ill. 243....(Kys x 5677) (K4 x L317)	Ill. 832....(R4 x Hy) (38-11 x I198)
*Ill. 246....(WF9 x Hy) (187-2 x L317)	*Ill. 838....(38-11 x Pr) (K4 x L317)
*Ill. 247....(187-2 x 38-11) (Hy x L317)	Ill. 845....(WF9 x CC1) (Pr x I205)
Ill. 308....(WF9 x M14) (4-8 x 187-2)	Ill. 846....(A x 90) (Pr x I205)
Ill. 310....(4-8 x 187-2) (Pr x I205)	Ill. 855....(R4 x Hy) (L317 x G)
Ill. 319....(WF9 x M14) (A x 90)	*Ill. 863....(R4 x Hy) (K4 x L317)
Ill. 329....(WF9 x 38-11) (Pr x I205)	*Ill. 877....(R4 x Pr) (K4 x L317)
Ill. 337....(A x 90) (187-2 x L317)	*Ill. 885A..(R4 x 38-11) (K4 x L317)
*Ill. 339....(CC5 x CC7) (A x 90)	Ill. 936....(A x Hy) (90 x L317)
Ill. 345....(Pr x I205) (WF9 x R4)	Ill. 940....(5120 x 4211) (I159 x L317)
*Ill. 350....(WF9 x R4) (187-2 x L317)	Ill. 944....(R4 x L317) (WF9 x Hy)
Ill. 355....(Pr x I205) (R4 x Hy)	Ill. 945....(WF9 x R4) (Tr x L317)
*Ill. 374....(R4 x Hy) (187-2 x L317)	*Ill. 947....(R4 x Pr) (Tr x L317)
Ill. 384....(WF9 x R4) (A x Hy)	*Ill. 960....(R4 x Hy) (701 x L317)
Ill. 387....(CC5 x CC7) (R4 x Hy)	*Ill. 972....(WF9 x Hy) (701 x L317)
Ill. 391....(A x Hy) (Tr x L317)	*Ill. 976....(WF9 x R4) (Hy x 540)
Ill. 427....(5120 x L317) (Hy x 540)	Ill. 1073..(R4 x L317) (5120 x Hy)
Ill. 432....(5120 x 4211) (K4 x L317)	Ill. 1075..(4-8 x Hy) (R4 x L317)
*Ill. 437....(Hy x WF9) (K4 x L317)	*Ill. 1092..(A x 90) (WF9 x CC1)
*Ill. 448....(38-11 x Kys) (K4 x L317)	*U. S. 5....(R4 x L317) (WF9 x 38-11)
Ill. 449....(Hy x 540) (K4 x L317)	*U. S. 13..(Hy x L317) (WF9 x 38-11)
*Ill. 450....(R4 x Kys) (K4 x L317)	*U. S. 14..(Hy x L317) (WF9 x R4)
Ill. 467....(Hy x 5120) (R4 x Kys)	*U. S. 35..(WF9 x 38-11) (R4 x Hy)
Ill. 498....(5120 x 4211) (701 x L317)	*U. S. 44..(187-2 x 4-8) (Hy x 540)
*Ill. 499....(Hy x 5120) (701 x L317)	*U. S. 45..(461-3 x 4-8) (Hy x 540)
Ill. 500....(WF9 x 38-11) (701 x L317)	U. S. 61..(R4 x 4-8) (Hy x 540)
Ill. 501....(WF9 x 38-11) (Hy x 5120)	*U. S. 63..(R4 x WF9) (Hy x 540)

CONTRIBUTORS OF SEED FOR THE 1940 TESTS

Bear Hybrids.....	A. Linn Bear.....	Decatur
Blackhawk.....	Otto Kreutzberg.....	Alhambra
Bunning White Dent.....	Henry Bunning.....	Moweaqua
Canterbury Yellow Dent.....	C. E. Canterbury.....	Cantrall
Champion White Pearl.....	F. V. Wilson & Son.....	Edgewood
Crow Hybrids.....	Crow Hybrid Corn Co.....	Milford
DeKalb Hybrids.....	DeKalb Agr. Assoc.....	DeKalb
Doubet Yellow Dent.....	E. W. Doubet.....	Hanna City
E. W. Doubet Hybrids.....	E. W. Doubet.....	Hanna City
Dyar Hybrid D44R.....	W. S. Dyar.....	Metamora
Funk Hybrids.....	Funk Bros. Seed Co.....	Bloomington
Furr Hybrids.....	Kenneth Furr.....	Genoa
Fritsch Bros. Hybrid 731.....	Fritsch Bros.....	Plano
Gunn Western Plowman.....	DeKalb Agr. Assoc.....	DeKalb
Hahn Hybrid 150A.....	Hahn Seed Co.....	Dwight
Henley and Whisnand Hybrids.....	T. Henley, M. Whisnand.....	Arcola
Holmes Utility Hybrids.....	Charles Holmes.....	Edelstein
Hoosier Crost Hybrids.....	George Marshall.....	St. Charles
Huebsch-Murdock.....	L. A. Huebsch & Son.....	Mundelein
Hulting Hybrids.....	G. E. Hulting & Son.....	Geneseo
Hunt White Dent.....	Chester A. Hunt.....	Morris
I.H.P. Hybrids.....	Ind. Hyb. Prod. of Ill., Inc.....	Pekin
Illinois Hybrid 21.....	W. S. Dyar.....	Metamora
Illinois Hybrid 21.....	Frey Hybrid Corn Co.....	Gilman
Illinois Hybrid 21.....	Huey Seed Co.....	Carthage
Illinois Hybrids 101, 246, 247, 350, 437, 600, 800, 801, 802, 804, 838.....	Ind. Hyb. Prod. of Ill., Inc.....	Pekin
Illinois Hybrid 126.....	Harold Oakes.....	Bluffs
Illinois Hyb. 200, 247, 449, 784, 863.....	C. E. Canterbury.....	Cantrall
Illinois Hyb. 200, 450, 784, 877, 885A.....	Castle Hybrid Corn Co.....	Alton
Illinois Hybrids 200, 448, 784, 877.....	Edwin Dallmier.....	Newton
Illinois Hybrids 200, 201, 374.....	Macon County Seed Co.....	Decatur
Illinois Hybrid 200.....	Mountjoy Seed Co.....	Atlanta
Illinois Hybrids 200, 448, 784, 804, 863, 877, 885A.....	George Pfeifer.....	Arcola
Illinois Hybrids 200, 448, 450, 784.....	Myron Whisnand.....	Arcola
Illinois Hybrids 200, 201, 499.....	Edward Wilson.....	Winchester
Illinois Hybrid 201.....	Joe Allen.....	Fisher
Illinois Hybrids 201, 206.....	C. Doubet & Son.....	Hanna City
Illinois Hybrid 201.....	Hahn Seed Company.....	Dwight
Illinois Hybrids 201, 805, 972.....	Charles Holmes.....	Edelstein
Illinois Hybrid 201.....	Lester L. Lehmann & Sons.....	Pleasant Plains
Illinois Hybrid 201.....	O. P. Tiemann.....	Bloomington
Illinois Hybrids 206, 784, 863, 877.....	Burrus Bros.....	Arenzville
Illinois Hybrid 206.....	J. E. Forsythe.....	Cooksville
Illinois Hybrids 206, 806, 885A.....	Thomas Henley.....	Arcola
Illinois Hybrids 212, 976.....	C. Leland Monier.....	Sparland
Illinois Hybrids 219, 1092.....	Nichols Bros.....	Hebron
Illinois Hybrid 247.....	Herman Lauer.....	Broadwell
Illinois Hybrid 339.....	L. A. Huebsch & Son.....	Mundelein
Illinois Hybrid 448.....	Leslie Daily.....	Mattoon
Illinois Hybrids 448, 566, 784, 838.....	Pocklington Bros.....	Nilwood
Illinois Hybrids 450, 546.....	Morgan Bros.....	Galva
Illinois Hybrid 751.....	H. H. Ferris.....	Princeton
Illinois Hybrid 751.....	Gentert Farms Seed Co.....	Lostant
Illinois Hybrid 751.....	F. A. Joslin.....	Erie
Illinois Hybrids 784, 877.....	Everett W. Kerns.....	Tuscola
Illinois Hybrid 784.....	Harlan Powers.....	Brocton
Illinois Hybrid 885A.....	Nickell Bros.....	Concord
Illinois Hybrid 947.....	Harry Koch.....	Bluffs
Illinois Hybrid 960.....	L. A. Sass.....	Ancona
Ioway Supercorn.....	Roland Holden.....	Williamsburg, Ia.

Iowea Hybrid	Michael-Leonard Seed Co.	Chicago
Kelly Hybrid	Kelly Seed Co.	San Jose
Krug	Krug Bros.	Minonk
Leaming	H. C. Neville	Harrisburg
Macon Hybrid 666	Macon County Seed Co.	Decatur
Maland Yellow Dent	John Maland	Leland
McLurkin White Dent	Theodore Brown	Coulterville
Miller Hybrids	Bert A. Miller	Forrest
M-L Hybrids	B. E. Moews	Granville
	L. L. Lowe	Aroma Park
Mohawk	Martin Schaeffer	Hoyleton
Morgan Hybrids	Morgan Bros.	Galva
Mountjoy Hybrid 2121	Mountjoy Seed Co.	Atlanta
Mountjoy Utility Dent	Mountjoy Seed Co.	Atlanta
National Hybrids	National Hybrid Corn Co.	Anamosa, Iowa
Null Hybrids	Null Seed Farms	Colchester
Null-Vollmer Hybrids	L. H. Vollmer	Liberty
Pfeifer Hybrid A-1-40	George Pfeifer	Arcola
Pfingston Yellow Dent	Fred Pfingston	Roselle
Pioneer Hi-Breds	Pioneer Hi-Bred Corn Co.	Princeton
Rice White Dent	J. R. Rice	Blue Mound
Richbred Hybrids	F. D. Richey	Ashville, Ohio
Roeschley Yellow Dent	Leo Roeschley	Graymont
Sager Hybrid 33W	Troy Sager	Kell
Sass Hybrids	L. A. Sass, Ancona; U. G. Sass, Streator	
Seeber Hybrids	Seeber Bros.	Champaign
Shuman Golden Beauty	Charles Shuman	Sullivan
Sibley Farm Hybrids	Sibley Farms	Sibley
Silver Cross Hybrid W12	Michael-Leonard Seed Co.	Chicago
Sommer Yellow Dent	George Pfeifer	Arcola
St. Charles White	E. H. Isenberg	Kauffman
Station Yellow Dent	Illinois Station	Urbana
Stelford's White Cap	H. J. Stelford	Hampshire
Stewart Hybrid S22	Frank S. Stewart	Princeville
Stiegelmeier Hybrids	H. L. Stiegelmeier	Normal
U. S. Hybrid 5	G. E. Hulting & Son	Geneseo
U. S. Hybrids 5, 15	Mountjoy Seed Co.	Atlanta
U. S. Hybrid 5	Harold Oakes	Bluffs
U. S. Hybrid 5	Producers' Crop Imp. Assoc.	Piper City
U. S. Hybrid 5	Frank S. Stewart	Princeville
U. S. Hybrids 13, 35	Burrus Bros.	Arenzville
U. S. Hybrid 13	C. E. Canterbury	Cantrall
U. S. Hybrid 13	C. Doubet & Son	Hanna City
U. S. Hybrids 13, 44	Frey Hybrid Corn Co.	Gilman
U. S. Hybrid 13	Charles Holmes	Edelstein
U. S. Hybrids 13, 35	Huey Seed Co.	Carthage
U. S. Hybrid 13	Lester L. Lehmann & Son	Pleasant Plains
U. S. Hybrid 13	C. Leland Monier	Sparland
U. S. Hybrid 13	Pocklington Bros.	Nilwood
U. S. Hybrids 13, 44	O. P. Tiemann	Bloomington
U. S. Hybrid 13	Van Horn Seed Co.	Cerro Gordo
U. S. Hybrids 14, 35, 44, 63	H. H. Ferris	Princeton
U. S. Hybrid 35	Joe Allen	Fisher
U. S. Hybrids 35, 44	I. L. & A. G. Sieben	Geneseo
U. S. Hybrid 44	Gentert Farms Seed Co.	Lostant
U. S. Hybrid 44	Morgan Bros.	Galva
U. S. Hybrid 45	L. A. Sass	Ancona
U. S. Hybrid 63	H. I. Coldwater & Son	Elwood
U. S. Hybrid 63	Carl Munson	Galesburg
Van Horn Hybrids	Van Horn Seed Co.	Cerro Gordo
Waddell Utility Dents	Elmer Waddell	Taylorville
Wessbecker Yellow Dent	Paul Wessbecker	Mt. Pulaski
Wilson Yellow Dent	Edward Wilson	Winchester
Wisconsin Hybrid 645	L. A. Huebsch & Son	Mundelein

Table 4.—NORTHEASTERN ILLINOIS: Round Lake

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain on Oct. 9	Mois- ture in grain at harvest (Nov. 15)	Erect plants	Rating for—		
		Total	Sound					Erect plants	Sound yield	General perform.
	1940	bu.	bu.	perct.	perct.	perct.	perct.	perct.	perct.	
1	*Funk Hybrid G-16.....	85.5	85.3	.26	35.8	22.0	53	200.0	118.3	138.7
2	Pioneer Hi-Bred 330.....	76.3	75.4	1.15	35.9	23.6	57	215.1	104.6	132.2
3	*Furr Hybrid 67.....	74.2	73.7	.71	40.0	22.9	53	200.0	102.2	126.6
4	Funk Hybrid G-114.....	73.9	72.1	2.43	36.3	23.4	53	200.0	100.0	125.0
5	*Holmes Utility Hybrid 19.....	81.0	80.7	.31	38.6	21.4	40	150.9	111.9	121.6
6	Wisconsin Hybrid 645 (Huebsch).....	75.4	72.0	4.52	29.7	20.4	39	147.2	99.9	117.1
7	Hoosier Crost Hybrid 405.....	74.9	70.7	5.59	35.0	23.6	45	169.8	98.1	116.0
8	Iowa Hybrid 16.....	76.4	75.9	.66	39.2	23.6	37	139.6	105.3	113.9
9	Funk Hybrid G-22.....	73.0	72.3	.99	36.5	23.6	40	150.9	100.3	113.0
10	Pioneer Hi-Bred 353.....	74.5	72.9	2.16	36.5	20.5	39	147.2	101.1	112.6
11	M-L Hybrid 14 (Moews-Lowe).....	72.8	72.6	.21	37.1	25.1	39	147.2	100.7	112.3
12	*Funk Hybrid G-174.....	79.1	72.1	8.82	34.8	21.4	39	147.2	100.0	111.8
13	Hoosier Crost Hybrid 422.....	71.0	70.9	.10	37.5	21.7	39	147.2	98.3	110.5
14	Funk Hybrid G-7.....	73.2	68.0	7.07	33.0	20.4	42	158.5	94.3	110.4
15	Furr Hybrid 44.....	74.6	72.3	3.12	32.3	21.0	37	139.6	100.3	110.1
16	Illinois Hyb. 1092 (Nichols Bros.).....	69.8	68.3	2.11	32.9	22.6	40	150.9	94.7	108.8
17	*Holmes Utility Hybrid 29.....	77.1	76.6	.63	38.0	24.2	32	120.8	106.2	108.4
18	*Illinois Hybrid 101 (I.H.P.).....	75.8	73.4	3.20	34.0	20.4	34	128.3	101.8	108.4
19	M-L Hybrid 20 (Moews-Lowe).....	69.6	68.7	1.31	37.1	20.4	39	147.2	95.3	108.3
20	M-L Hybrid 15 (Moews-Lowe).....	79.1	77.2	2.40	38.7	22.9	29	109.4	107.1	107.7
21	*Furr Hybrid 7.....	77.2	76.5	.88	33.8	22.3	29	109.4	106.1	106.9
22	*M-L Hybrid 19 (Moews-Lowe).....	74.7	74.3	.52	37.8	23.8	31	117.0	103.1	106.6
23	Iowa Hybrid A.....	75.4	73.8	2.18	34.0	20.7	31	117.0	102.4	106.1
24	DeKalb Hybrid 410.....	76.2	71.8	5.82	31.6	20.2	33	124.5	99.6	105.8
25	Funk Hybrid G-15.....	77.1	76.9	.26	34.4	21.4	27	101.8	106.7	105.5
26	Pioneer Hi-Bred 353A.....	80.8	80.1	.92	31.1	20.0	23	86.8	111.1	105.0
27	*Nichols Bros. Hybrid N-202.....	75.8	74.7	1.50	32.7	22.0	28	105.7	103.6	104.1
28	*DeKalb Experimental Hybrid 21.....	71.7	70.9	1.08	31.4	19.4	30	113.2	98.3	102.0
29	Furr Hybrid 66.....	68.8	67.2	2.28	32.7	21.4	33	124.5	93.2	101.0
30	Illinois Hyb. 219 (Nichols Bros.).....	76.6	74.5	2.80	33.2	22.0	26	98.1	100.3	99.8
31	Pioneer Hi-Bred 322.....	81.8	80.9	1.07	36.3	20.4	16	60.4	112.2	99.2
32	M-L Hybrid 13 (Moews-Lowe).....	81.4	76.2	6.33	32.0	20.7	21	79.2	105.7	99.1
33	*I.H.P. (4226 x 187-2) (WF9 x CCI).....	71.3	70.8	.69	26.6	20.1	27	101.9	98.2	99.1
34	National Hybrid 116.....	70.6	70.3	.40	36.3	21.7	27	101.9	97.5	98.6
35	*Illinois Hybrid 350 (I.H.P.).....	73.4	73.3	.14	38.4	23.6	23	86.8	101.7	98.0
36	Pioneer Hi-Bred 355.....	64.3	54.8	14.70	25.7	18.2	43	162.3	76.0	97.6
37	Pioneer Hi-Bred 349.....	84.0	82.2	2.16	34.8	19.8	11	41.5	114.0	95.9
38	National Hybrid 114.....	72.4	70.9	2.02	34.0	21.0	23	86.8	98.3	95.4
39	DeKalb Hybrid 404A.....	81.9	80.9	1.17	33.9	20.7	11	41.5	112.2	94.5
40	National Hybrid 112.....	74.6	73.4	1.56	30.5	19.8	19	71.7	101.8	94.3
41	Pioneer Hi-Bred 324.....	79.5	79.2	.37	33.9	21.0	12	45.3	109.9	93.8
42	*Bear Hybrid OK-22.....	79.8	79.4	.51	33.8	20.4	11	41.5	110.1	93.0
43	*DeKalb Hybrid 493.....	73.7	72.8	1.25	30.0	20.2	18	67.9	101.0	92.7
44	*Funk Hybrid G-18.....	71.2	67.3	5.42	32.5	20.2	24	90.6	93.3	92.6
45	DeKalb Hybrid 240.....	75.6	71.8	5.04	30.0	19.2	18	67.9	99.6	91.7
46	Illinois Hybrid 339 (Huebsch).....	75.6	72.5	4.07	33.0	20.4	17	64.2	100.6	91.5
47	Hoosier Crost Hybrid 668-L.....	75.3	74.9	.51	37.6	27.5	10	37.7	103.9	87.4
48	Pioneer Hi-Bred 370.....	77.7	77.4	.34	29.3	18.7	7	26.4	107.4	87.2
49	*Richbred Hybrid 894.....	70.8	70.0	1.20	40.2	28.5	15	56.6	97.1	87.0
50	DeKalb Hybrid 204.....	78.4	76.2	2.77	31.2	21.4	8	30.2	105.7	86.8
51	Iowa Hybrid 25R.....	71.7	70.3	1.91	32.9	26.7	13	49.1	97.5	85.4
52	Maland Yellow Dent.....	71.9	66.6	7.36	32.9	22.3	17	64.2	92.4	85.4
53	Illinois Hybrid 972 (Holmes).....	67.8	66.8	1.47	38.1	25.4	15	56.6	92.7	83.7
54	DeKalb Hybrid 421.....	76.5	74.2	3.03	34.1	24.0	6	22.6	102.9	82.8
55	Pfingston Yellow Dent.....	65.1	64.2	1.33	31.2	23.4	13	49.1	89.0	79.0
56	DeKalb Hybrid 400.....	73.5	72.1	1.86	28.5	18.9	3	11.3	100.0	77.8
57	Gunn Western Plowman.....	61.9	59.6	3.67	34.5	20.7	15	56.6	82.7	76.2
	● Average of 5 open-pollinated var.....	64.2	58.8	8.63	32.5	23.2	14	52.9	81.6	74.5
58	Huebsch Murdock Yellow Dent.....	64.1	58.2	9.16	30.0	21.4	12	45.3	80.7	71.8
59	Silver Cross Hyb. W12 (Iowa Hybrid).....	61.4	59.8	2.57	27.6	17.6	3	11.3	82.9	65.0
60	Stelford's White Cap.....	58.1	45.5	21.62	34.0	28.4	13	49.1	63.1	59.6
	Average of all entries.....	74.1	72.1	2.94	33.9	21.8	26.5	.....	.....	.....

*Less than 5 bushels of seed sampled.

A difference of less than 5.6 bushels between total yields of any two entries in this table is not significant.

Table 5.—NORTHEASTERN ILLINOIS: Round Lake Summaries

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
(A) Average yield of entries grown in 1939 and 1940									
		bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	Funk Hybrid G-16.....	75.4	75.2	.22	18.8	76.5	126.2	108.8	113.2
2	Pioneer Hi-Bred 330.....	72.8	71.8	1.24	20.6	78.0	128.7	103.9	110.1
3	Funk Hybrid G-114.....	70.4	69.5	1.26	21.1	76.5	126.2	100.6	107.0
4	M-L Hybrid 13 (Moews-Lowe).....	78.0	75.4	3.19	19.6	60.5	99.8	109.1	106.8
5	Wisconsin Hybrid 645.....	72.8	71.0	2.40	17.8	69.5	114.7	102.8	105.8
6	M-L Hybrid 15 (Moews-Lowe).....	73.4	72.4	1.20	20.6	64.0	105.6	104.8	105.0
7	DeKalb Hybrid 404A.....	75.6	75.0	.74	18.4	55.5	91.6	108.5	104.3
8	Funk Hybrid G-15.....	72.5	72.4	.19	19.4	62.0	102.3	104.8	104.2
9	Pioneer Hi-Bred 322.....	74.7	74.0	.95	18.4	57.0	94.1	107.1	103.8
10	Iowaleth Hybrid A.....	71.5	70.6	1.16	18.4	64.5	106.4	102.2	103.2
11	Illinois Hybrid 219 (Nichols Bros.).....	71.9	70.8	1.52	20.2	63.0	104.0	102.5	102.9
12	DeKalb Hybrid 240.....	74.8	72.9	2.54	16.5	57.0	94.1	105.5	102.6
13	Pioneer Hi-Bred 349.....	74.7	73.6	1.37	17.3	54.0	89.1	106.5	102.2
14	Pioneer Hi-Bred 324.....	73.8	73.6	.20	17.9	52.5	86.6	106.5	101.5
14	DeKalb Hybrid 421.....	74.6	73.4	1.54	19.8	53.0	87.5	106.2	101.5
16	DeKalb Hybrid 204.....	72.9	71.7	1.51	19.2	53.5	88.3	103.8	99.9
17	Illinois Hybrid 1092 (Nichols Bros.).....	66.2	65.4	1.16	19.8	69.0	113.9	94.6	99.4
18	DeKalb Hybrid 493.....	70.9	70.4	.80	17.6	55.5	91.6	101.9	99.3
19	Illinois Hybrid 972 (Holmes).....	69.9	69.4	.78	22.2	57.0	94.1	100.4	98.8
20	Funk Hybrid G-18.....	70.0	67.9	2.86	18.6	60.5	99.8	98.3	98.7
21	Pioneer Hi-Bred 355.....	65.6	60.6	7.81	15.6	76.5	126.2	87.7	97.3
22	Maland Yellow Dent.....	64.4	61.6	3.85	20.3	52.5	86.6	89.1	88.5
23	Huebsch-Murdock Yellow Dent.....	62.7	59.7	4.65	18.4	48.5	80.0	86.4	84.8
24	Gunn Western Plowman.....	58.2	57.0	1.94	18.2	52.5	86.6	82.5	83.5
● Average of 5 open-pollinated varieties.....		60.7	57.9	4.47	20.0	49.6	81.8	83.8	83.3
25	Stelford's White Cap.....	59.4	53.0	11.10	22.3	46.5	76.7	76.7	76.7
Average of all entries.....		70.7	69.1	2.25	19.1	60.6	....	....	....
(B) Average yield of entries grown in 1938, 1939, 1940									
1	Funk Hybrid G-114.....	72.6	71.8	.97	24.7	84.2	121.0	103.9	108.2
2	DeKalb Hybrid 404A.....	75.5	75.1	.58	21.9	69.7	100.1	108.7	106.6
3	Pioneer Hi-Bred 349.....	76.4	75.4	1.33	21.2	68.2	98.0	109.1	106.3
4	Pioneer Hi-Bred 322.....	74.7	73.6	1.45	21.6	70.3	101.0	106.5	105.1
5	Funk Hybrid G-15.....	71.9	71.7	.29	22.6	74.2	106.6	103.8	104.5
6	DeKalb Hybrid 421.....	74.2	73.3	1.18	22.6	67.7	97.3	106.1	103.9
7	DeKalb Hybrid 493.....	71.0	70.3	.98	20.7	69.2	99.4	101.7	101.1
8	Iowaleth Hybrid A.....	69.0	68.2	1.07	20.3	74.0	106.3	98.7	100.6
9	DeKalb Hybrid 204.....	70.8	70.0	1.12	22.8	68.2	98.0	101.3	100.5
10	Maland Yellow Dent.....	64.7	62.8	2.69	23.2	65.2	93.7	90.9	91.6
● Average of 5 open-pollinated varieties.....		61.2	59.2	3.17	22.5	62.1	89.2	85.7	86.6
11	Gunn Western Plowman.....	59.5	58.6	1.45	21.1	63.5	91.2	84.8	86.4
12	Huebsch-Murdock Yellow Dent.....	60.4	58.2	3.54	20.6	61.5	88.4	84.2	85.2
Average of all entries.....		70.1	69.1	1.39	21.9	69.6	....	....	....
(C) Average yield of entries grown in 1937, 1938, 1939, 1940									
1	DeKalb Hybrid 421.....	72.6	71.9	.95	22.7	71.8	106.8	112.2	110.8
2	DeKalb Hybrid 204.....	69.9	69.3	.84	22.9	73.1	108.8	108.1	108.3
3	DeKalb Hybrid 493.....	67.8	67.1	1.10	21.9	70.9	105.5	104.7	104.9
4	Maland Yellow Dent.....	61.6	60.0	2.45	24.1	63.9	95.1	93.6	94.0
5	Gunn Western Plowman.....	59.2	58.5	1.16	21.1	63.6	94.6	91.3	92.1
● Average of 5 open-pollinated varieties.....		59.7	58.1	2.64	22.8	61.6	91.7	90.6	90.9
6	Huebsch-Murdock Yellow Dent.....	59.6	57.9	2.66	19.4	59.6	88.7	90.3	89.9
Average of all entries.....		65.1	64.1	1.53	22.0	67.2	....	....	....
(D) Average yield of entries grown in 1936, 1937, 1938, 1939, 1940									
1	DeKalb Hybrid 421.....	71.9	71.2	.90	25.3	72.5	110.5	115.4	114.2
2	DeKalb Hybrid 493.....	66.7	66.1	.98	24.4	71.5	109.0	107.1	107.6
3	Gunn Western Plowman.....	57.6	56.8	1.31	24.4	61.1	93.1	92.1	92.4
● Average of 5 open-pollinated varieties.....		57.0	55.5	2.50	25.5	58.8	89.6	89.9	89.8
4	Huebsch-Murdock Yellow Dent.....	54.2	52.8	2.47	23.8	57.3	87.3	85.6	86.0
Average of all entries.....		62.6	61.7	1.42	24.5	65.6	....	....	....

Table 6.—NORTHERN ILLINOIS: Kings

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain on Oct. 8	Moisture in grain at harvest (Nov. 8)	Erect plants	Rating for—		
		Total	Sound					Erect plants	Sound yield	General perform.
1940										
1	Iowaleth Hybrid 25R.....	115.1	109.3	5.06	32.9	23.7	95	99.6	118.3	113.6
2	*Hahn Hybrid 150A.....	116.9	108.5	7.15	36.7	25.9	93	97.5	117.4	112.4
3	U. S. Hybrid 63 (Coldwater).....	111.9	106.1	5.19	34.8	22.4	100	104.8	114.8	112.3
4	*Holmes Utility Hybrid 39.....	112.3	105.4	6.16	33.1	22.4	100	104.8	114.1	111.8
5	Illinois Hybrid 751 (Joslin).....	109.2	104.8	4.07	33.1	21.8	100	104.8	113.4	111.2
6	*Richbred Hybrid 894.....	110.6	105.8	4.32	39.3	27.3	96	100.6	114.5	111.0
7	DeKalb Hybrid 607.....	109.8	107.7	1.87	31.8	21.8	88	92.2	116.6	110.5
8	Illinois Hybrid 751 (Gentert).....	110.4	103.8	6.00	36.1	22.4	97	101.7	112.3	109.7
9	Iowaleth Hybrid 18.....	108.0	103.6	4.08	36.5	21.8	97	101.7	112.1	109.5
10	*Bear Hybrid OK-24.....	111.0	104.3	6.00	33.3	21.1	94	98.5	112.9	109.3
11	Pioneer Hi-Bred 307.....	111.0	104.0	6.28	33.3	23.7	93	97.5	112.6	108.8
12	Pioneer Hi-Bred 322.....	107.9	102.6	4.94	31.3	20.8	96	100.6	111.0	108.4
13	Seeber Hybrid 50.....	109.0	101.5	6.84	36.3	26.4	98	102.7	109.9	108.1
14	*Ioway-Supercorn 214-H.....	108.4	100.8	7.03	31.1	20.8	100	104.8	109.1	108.0
15	Pioneer Hi-Bred 324.....	105.8	101.1	4.45	32.2	21.1	96	100.6	109.4	107.2
16	Morgan Hybrid M-52.....	108.1	102.3	5.33	37.2	22.7	91	95.4	110.7	106.9
17	*Illinois Hybrid 350 (I.H.P.).....	104.9	100.1	4.60	35.0	22.7	97	101.7	108.3	106.6
17	*Funk Hybrid G-37.....	105.6	99.3	5.98	36.0	23.7	99	103.8	107.5	106.6
19	*Bear Hybrid OK-23.....	114.6	103.0	10.10	31.3	23.0	87	91.2	111.5	106.4
20	Pioneer Hi-Bred 314.....	107.6	100.5	6.58	34.6	22.1	94	98.5	108.8	106.2
21	National Hybrid 117.....	101.5	98.8	2.63	33.7	21.1	97	101.7	106.9	105.6
22	*Holmes Utility Hybrid 49.....	107.2	97.7	8.84	35.8	24.8	100	104.8	105.7	105.5
23	DeKalb Hybrid 615.....	104.9	97.6	6.97	34.0	21.4	100	104.8	105.6	105.4
24	U. S. Hybrid 44 (Sieben).....	111.7	101.4	9.24	34.0	24.3	87	91.2	109.7	105.1
25	*Sass Hybrid 30.....	107.0	98.2	8.22	36.2	21.4	96	100.6	106.3	104.9
26	M-L Hybrid 120 (Moews-Lowe).....	102.2	96.7	5.40	34.5	24.5	99	103.8	104.7	104.5
27	DeKalb Hybrid 421.....	104.9	100.4	4.26	31.5	20.7	87	91.2	108.7	104.3
28	*DeKalb Experimental Hyb. 43.....	105.9	96.4	8.98	32.8	23.0	96	100.6	104.3	103.4
28	DeKalb Hybrid 404A.....	104.2	96.4	7.52	30.2	20.8	96	100.6	104.3	103.4
30	*E. W. Doubet Hybrid D3.....	102.6	95.8	6.65	33.8	22.1	95	99.6	103.7	102.7
30	U. S. Hybrid 63 (Ferris).....	101.8	94.9	6.82	35.1	21.8	98	102.7	102.7	102.7
32	Funk Hybrid G-114.....	100.8	94.6	6.17	33.2	23.3	98	102.7	102.4	102.5
33	*Furr Hybrid 67.....	102.8	94.7	7.89	33.1	23.3	97	101.7	102.5	102.3
34	Illinois Hybrid 751 (Ferris).....	104.3	93.9	9.95	32.9	23.7	99	103.8	101.6	102.2
34	National Hybrid 116.....	99.3	93.9	5.45	34.7	21.8	99	103.8	101.6	102.2
36	Iowaleth Hybrid AQ.....	100.3	94.5	5.74	34.7	22.7	95	99.6	102.3	101.6
37	M-L Hybrid 14 (Moews-Lowe).....	98.7	92.4	6.34	34.0	24.3	100	104.8	100.0	101.2
38	Furr Hybrid 88.....	102.1	92.5	9.42	35.9	22.1	99	103.8	100.1	101.0
39	Illinois Hybrid 976 (Monier).....	100.6	92.5	8.08	33.6	23.0	98	102.7	100.1	100.8
40	Furr Hybrid 78.....	102.9	92.3	10.28	29.9	22.7	94	98.5	99.9	99.6
40	Pioneer Hi-Bred 353.....	102.1	90.4	11.42	28.0	19.6	100	104.8	97.8	99.6
42	Pioneer Hi-Bred 330.....	101.6	89.4	11.96	34.8	23.7	100	104.8	96.8	98.8
43	Holmes Utility Hybrid 35.....	101.6	89.8	11.62	37.5	24.1	98	102.7	97.2	98.5
44	Furr Hybrid 77.....	100.4	88.7	11.63	33.7	23.9	99	103.8	96.0	97.9
45	Funk Hybrid G-19.....	99.8	88.2	11.67	30.7	22.1	99	103.8	95.5	97.6
46	Iowaleth Hybrid AQF.....	94.6	87.4	7.63	32.5	21.1	99	103.8	94.6	96.9
47	Funk Hybrid G-22.....	92.9	87.4	5.88	34.0	22.1	96	100.6	94.6	96.1
48	*I.H.P. Hybrid 66.....	86.6	85.8	.91	34.0	22.1	100	104.8	92.9	95.9
49	Hoosier Crost Hybrid 422.....	90.5	85.1	6.02	32.9	21.8	100	104.8	92.1	95.3
50	Funk Hybrid G-25.....	89.0	85.0	4.46	35.5	21.1	99	103.8	92.0	94.9
51	*Fritsch Bros. Hybrid 731.....	97.5	86.4	11.42	33.0	22.4	94	98.5	93.5	94.7
52	M-L Hybrid 20 (Moews-Lowe).....	94.7	83.9	11.38	31.9	22.4	98	102.7	90.8	93.8
53	DeKalb Hybrid 410.....	98.8	82.5	16.50	29.0	20.5	97	101.7	89.3	92.4
54	Hunt White Dent.....	87.2	83.3	4.46	34.5	23.0	71	74.4	90.2	86.2
55	M-L Hybrid 15 (Moews-Lowe).....	90.7	72.4	20.14	30.6	24.5	100	104.8	78.4	85.0
56	M-L Hybrid 13 (Moews-Lowe).....	96.0	68.4	28.78	31.4	22.1	100	104.8	74.0	81.7
57	Maland Yellow Dent.....	83.5	62.5	25.18	30.3	23.3	88	92.2	67.6	73.7
●	Average of 5 open-pollinated var.	75.7	56.4	26.64	31.8	22.6	89	83.8	61.0	66.7
58	Pfingston Yellow Dent.....	77.3	49.5	36.00	30.4	21.3	77	80.7	53.6	60.4
59	Gunn Western Plowman.....	68.4	48.6	28.94	32.2	21.8	78	81.8	52.6	59.9
60	Stelford's White Cap.....	62.0	38.1	38.62	31.8	23.7	86	90.1	41.2	53.4
Average of all entries.....		101.3	92.4	9.35	33.5	22.6	95.4	....	....	....

*Less than 5 bushels of seed sampled.

A difference of less than 5.4 bushels between total yields of any two entries in this table is not significant.

Table 7.—NORTHERN ILLINOIS: Kings Summaries

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
(A) Average yield of entries grown in 1939 and 1940									
		<i>bu.</i>	<i>bu.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	
1	Pioneer Hi-Bred 307.....	102.2	98.2	3.66	20.0	96.5	101.8	111.5	109.1
2	Pioneer Hi-Bred 314.....	101.5	97.8	3.44	18.4	96.5	101.8	111.0	108.7
3	Illinois Hybrid 751.....	100.0	96.4	3.34	19.8	99.0	104.4	109.4	108.2
4	DeKalb Hybrid 615.....	98.8	95.1	3.50	19.0	100.0	105.5	107.9	107.3
5	Pioneer Hi-Bred 324.....	99.4	96.4	2.86	18.5	95.5	100.7	109.4	107.2
5	Pioneer Hi-Bred 322.....	99.3	95.9	3.28	18.1	97.0	102.3	108.9	107.2
7	Funk Hybrid G-37.....	98.8	94.8	3.91	19.8	99.5	105.0	107.6	107.0
8	National Hybrid 117.....	95.2	93.6	1.54	18.2	97.0	102.3	106.2	105.2
9	DeKalb Hybrid 404A.....	97.6	93.2	4.40	18.4	97.5	102.9	105.8	105.1
10	DeKalb Hybrid 421.....	99.1	95.8	3.29	18.2	89.0	93.9	108.7	105.0
11	Morgan Hybrid M-52.....	97.5	94.4	2.94	19.8	92.0	97.1	107.2	104.7
12	E. W. Doubet Hybrid D3.....	96.3	92.4	3.96	19.9	97.5	102.9	104.9	104.4
13	Funk Hybrid G-114.....	95.1	91.9	3.21	20.1	98.5	103.9	104.3	104.2
14	National Hybrid 116.....	94.6	91.8	2.81	19.1	98.5	103.9	104.2	104.1
15	L.H.P. Hybrid 66.....	92.0	91.4	.54	19.3	99.5	105.0	103.7	104.0
16	Furr Hybrid 77.....	97.0	91.0	5.97	20.4	98.5	103.9	103.3	103.4
17	Iowalt Hybrid AQ.....	94.3	91.3	2.98	19.2	97.0	102.3	103.6	103.3
18	Pioneer Hi-Bred 330.....	96.2	90.3	6.01	21.1	100.0	105.5	102.5	103.2
19	M-L Hybrid 14 (Moews-Lowe).....	93.4	90.1	3.40	20.1	100.0	105.5	102.3	103.1
20	Funk Hybrid G-22.....	91.6	88.8	3.08	18.8	96.5	101.8	100.8	101.1
21	Iowalt Hybrid AQF.....	91.2	87.6	3.82	18.0	99.5	105.0	99.4	100.8
22	Funk Hybrid G-19.....	93.1	86.9	6.28	19.8	96.5	101.8	98.6	99.4
23	M-L Hybrid 15 (Moews-Lowe).....	90.2	80.5	10.72	20.2	99.0	104.4	91.4	94.6
24	M-L Hybrid 13 (Moews-Lowe).....	93.8	80.0	14.52	19.2	100.0	105.5	90.8	94.5
25	Hunt White Dent.....	77.6	75.6	2.36	21.1	72.5	76.5	85.8	83.5
26	Maland Yellow Dent.....	79.9	69.4	12.66	20.1	81.5	86.0	78.8	80.6
●	Average of 5 open-pollinated varieties.....	74.4	64.5	13.69	19.9	77.9	82.2	73.2	75.4
27	Gunn Western Plowman.....	72.0	62.0	14.64	18.6	78.5	82.8	70.4	73.5
28	Stelford's White Cap.....	68.1	55.0	20.80	20.4	81.0	85.4	62.4	68.2
Average of all entries.....		93.1	88.1	5.50	19.4	94.8	....	....	....
(B) Average yield of entries grown in 1938, 1939, 1940									
1	Pioneer Hi-Bred 314.....	98.6	95.8	2.70	18.3	90.6	103.4	109.9	108.3
2	Pioneer Hi-Bred 322.....	97.2	94.8	2.36	18.0	90.3	103.1	108.7	107.3
3	Illinois Hybrid 751.....	95.8	93.2	2.41	20.1	93.8	107.1	106.9	107.0
4	Morgan Hybrid M-52.....	96.8	94.7	1.96	19.7	86.8	99.1	108.6	106.2
5	M-L Hybrid 14 (Moews-Lowe).....	94.5	91.9	2.63	20.9	93.8	107.1	105.4	105.8
6	DeKalb Hybrid 421.....	96.6	94.3	2.29	18.1	84.0	95.9	108.1	105.1
7	National Hybrid 117.....	92.8	91.6	1.23	18.4	91.7	104.7	105.0	104.9
8	DeKalb Hybrid 404A.....	94.0	91.0	3.00	18.2	92.3	105.4	104.4	104.6
9	Iowalt Hybrid AQF.....	92.0	89.4	2.68	17.9	93.3	106.5	102.5	103.5
10	Iowalt Hybrid AQ.....	91.4	89.3	2.02	19.3	90.7	103.5	102.4	102.7
11	National Hybrid 116.....	90.4	88.5	1.95	18.8	92.5	105.6	101.5	102.5
12	Funk Hybrid G-19.....	91.4	86.9	4.60	19.3	91.2	104.1	99.7	100.8
13	M-L Hybrid 15 (Moews-Lowe).....	89.3	82.7	7.22	19.7	96.5	110.2	94.8	98.6
14	Hunt White Dent.....	75.8	73.9	2.27	20.6	66.7	76.1	84.7	82.6
15	Maland Yellow Dent.....	78.4	71.2	8.62	19.3	74.3	84.8	81.7	82.5
16	Gunn Western Plowman.....	73.6	66.7	9.95	18.1	73.8	84.3	76.5	78.4
●	Average of 5 open-pollinated varieties.....	74.2	67.2	9.71	19.2	71.3	81.4	77.1	78.2
Average of all entries.....		90.5	87.2	3.62	19.0	87.6	....	....	....
(C) Average yield of entries grown in 1937, 1938, 1939, 1940									
1	Pioneer Hi-Bred 322.....	96.9	95.0	1.82	18.5	79.2	103.1	109.1	107.6
2	Pioneer Hi-Bred 314.....	96.5	94.3	2.13	19.2	76.5	99.6	108.3	106.1
3	National Hybrid 117.....	92.5	91.6	.92	19.6	82.8	107.8	105.2	105.8
4	Illinois Hybrid 751.....	92.1	90.1	1.85	20.2	86.4	112.5	103.4	105.7
5	Iowalt Hybrid AQ.....	92.0	90.3	1.62	19.8	82.8	107.8	103.7	104.7
6	DeKalb Hybrid 421.....	94.7	92.9	1.76	19.6	72.5	94.4	106.7	103.6
7	Funk Hybrid G-19.....	91.2	87.8	3.45	19.7	81.1	105.6	100.8	102.0
8	Maland Yellow Dent.....	77.7	72.3	6.53	20.0	64.8	84.4	83.0	83.5
9	Gunn Western Plowman.....	74.5	69.4	7.47	18.5	64.9	84.5	79.7	80.9
●	Average of 5 open-pollinated varieties.....	73.8	68.4	7.38	20.0	62.4	81.3	78.5	79.2
Average of all entries.....		89.8	87.1	2.76	19.5	76.8	....	....	....
(D) Average yield of entries grown in 1936, 1937, 1938, 1939, 1940									
1	DeKalb Hybrid 421.....	88.3	86.4	2.12	19.4	78.4	101.2	110.9	108.5
2	Illinois Hybrid 751.....	85.7	83.6	2.34	20.9	86.2	111.2	107.3	108.3
3	Gunn Western Plowman.....	68.3	63.8	6.51	19.1	68.0	87.7	81.9	83.4
●	Average of 5 open-pollinated varieties.....	68.8	64.0	6.83	20.1	65.2	84.1	82.2	82.7
Average of all entries.....		80.8	77.9	3.66	19.8	77.5	....	....	....

Table 8.—WEST NORTH-CENTRAL ILLINOIS: Cambridge

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
	1940	bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	Pioneer Hi-Bred 313.....	108.1	100.2	7.33	21.7	94	100.6	120.0	115.2
2	M-L Hybrid 500 (Moews-Lowe).....	99.1	96.9	2.17	21.1	100	107.1	116.0	113.8
3	Morgan Hybrid M-52A.....	101.5	98.2	3.28	19.9	91	97.4	117.6	112.6
4	Pioneer Hi-Bred 332.....	102.7	96.2	6.34	21.4	97	103.9	115.2	112.4
5	Seeber Hybrid 11A.....	97.7	95.8	1.94	20.8	97	103.9	114.7	112.0
6	Illinois Hybrid 960 (L. A. Sass).....	98.6	96.6	2.07	19.2	92	98.5	115.7	111.4
7	Ioway-Supercorn 123-H.....	97.5	93.5	4.09	17.1	97	103.9	112.0	110.0
8	*Hahn Hybrid 150A.....	96.7	93.2	3.60	20.8	98	104.9	111.6	109.9
9	Funk Hybrid G-212.....	95.0	93.5	1.60	20.8	92	98.5	112.0	108.6
10	DeKalb Hybrid 827.....	92.8	92.0	.84	17.9	96	102.8	110.2	108.4
11	U. S. Hybrid 35 (Ferris).....	95.3	92.3	3.12	17.9	95	101.7	110.5	108.3
11	*Null Hybrid N-85.....	96.8	91.7	5.31	17.0	97	103.9	109.8	108.3
13	*Illinois Hybrid 600 (I.H.P.).....	94.7	90.7	4.22	19.9	98	104.9	108.6	107.7
14	M-L Hybrid 523 (Moews-Lowe).....	96.0	91.0	5.17	18.3	96	102.8	109.0	107.4
15	*Holmes Utility Hybrid 59.....	93.2	89.7	3.74	18.5	100	107.1	107.4	107.3
16	*Sass Hybrid 17 (L. A. Sass).....	96.2	93.8	2.50	18.5	86	92.1	112.3	107.2
17	Sass Hybrid 305 (U. G. Sass).....	91.7	89.6	2.25	18.3	97	103.9	107.3	106.4
18	Iowalth Hybrid 25R.....	95.7	90.4	5.52	18.1	93	99.6	108.3	106.1
19	Sass Hybrid 50 (L. A. Sass).....	94.4	90.0	4.66	18.7	94	100.6	107.8	106.0
20	National Hybrid 129.....	92.3	89.7	2.82	18.3	92	98.5	107.4	105.2
21	Funk Hybrid G-53.....	88.1	87.5	.69	19.0	98	104.9	104.8	104.8
22	Illinois Hybrid 201 (C. Doubet & Son).....	93.5	87.3	6.62	17.9	98	104.9	104.6	104.7
23	Pioneer Hi-Bred 307.....	93.0	87.8	5.56	18.5	96	102.8	105.1	104.5
24	U. S. Hybrid 14 (Ferris).....	93.2	89.9	3.49	19.1	87	93.2	107.7	104.1
24	Illinois Hybrid 21 (Frey).....	89.5	86.3	3.63	19.0	99	106.0	103.4	104.1
26	Pioneer Hi-Bred 333.....	90.4	86.6	4.15	17.9	97	103.9	103.7	103.8
26	U. S. Hybrid 35 (Sieben).....	89.0	86.1	3.29	17.9	98	106.0	103.1	103.8
28	Ioway-Supercorn 218-H.....	88.4	86.0	2.77	17.3	99	106.0	103.0	103.8
29	M-L Hybrid 514 (Moews-Lowe).....	89.3	87.0	2.63	17.3	95	101.7	104.2	103.6
30	M-L Hybrid 528 (Moews-Lowe).....	89.2	86.3	3.27	17.6	97	103.9	103.4	103.5
31	Pioneer Hi-Bred 334.....	91.0	88.0	3.30	19.2	91	97.4	105.4	103.4
31	*Null Hybrid N-73.....	92.2	85.9	6.80	18.7	98	104.9	102.9	103.4
33	Morgan Hybrid M-52.....	93.9	88.0	6.28	18.7	90	96.4	105.4	103.2
34	DeKalb Hybrid 800.....	85.7	85.2	.60	18.3	99	106.0	102.0	103.0
35	Illinois Hybrid 201 (Holmes).....	90.9	84.9	6.58	17.3	98	104.9	101.7	102.5
36	*Stewart Hybrid S-22.....	89.2	84.5	5.26	18.5	99	106.0	101.2	102.4
37	Funk Hybrid G-169.....	86.6	85.2	1.62	18.3	95	101.7	102.0	101.9
38	Holmes Utility Hybrid 35.....	86.9	84.0	3.33	18.5	98	104.9	100.6	101.7
39	Iowalth Hybrid 25.....	89.7	87.2	2.74	17.6	87	93.2	104.4	101.6
40	*Illinois Hybrid 21 (Dyar).....	89.2	83.9	5.95	19.0	97	103.9	100.5	101.4
41	U. S. Hybrid 44 (Ferris).....	88.2	84.2	4.59	18.1	96	102.8	100.8	101.3
42	Bear Hybrid OK-72.....	91.5	85.4	6.65	18.7	91	97.4	102.3	101.1
43	U. S. Hybrid 44 (Sieben).....	85.1	84.4	.85	19.8	94	100.6	101.1	101.0
43	Sass Hybrid 40 (U. G. Sass).....	88.0	83.5	5.16	17.9	97	103.9	100.0	101.0
45	U. S. Hybrid 44 (Morgan).....	87.3	84.7	2.95	18.5	92	98.5	101.4	100.7
46	*Illinois Hybrid 350 (I.H.P.).....	91.4	87.7	4.04	17.1	80	85.7	105.0	100.2
47	Illinois Hybrid 374 (Macon Co. Seed Co.).....	86.5	84.0	2.92	19.8	90	96.4	100.6	99.6
48	Morgan Hybrid M-52B.....	85.4	83.3	2.48	19.7	92	98.5	99.8	99.5
49	Hulting Hybrid 380.....	88.1	84.5	4.05	18.1	86	92.1	101.2	98.9
50	National Hybrid 119.....	87.5	83.4	4.73	19.6	89	95.3	99.9	98.8
51	U. S. Hybrid 5 (Hulting).....	83.1	80.3	3.34	17.2	96	102.8	96.2	97.8
52	Illinois Hybrid 546 (Morgan).....	84.3	81.0	3.90	19.2	90	96.4	97.0	96.8
52	Bear Hybrid OK-46.....	80.5	80.0	.63	18.3	93	99.6	95.8	96.8
55	U. S. Hybrid 63 (Munson).....	79.8	79.4	.48	19.0	95	101.7	95.1	96.8
55	Funk Hybrid G-63.....	83.5	78.6	5.81	19.0	97	103.9	94.1	96.6
56	M-L Hybrid 120 (Moews-Lowe).....	83.3	79.2	4.87	19.6	95	101.7	94.8	96.5
57	*Richbred Hybrid 381.....	83.8	78.1	6.80	24.3	97	103.9	93.5	96.1
58	E. W. Doubet Hybrid D7.....	79.6	78.6	1.23	19.4	95	101.7	94.1	96.0
59	Funk Hybrid G-32.....	82.3	79.5	3.38	21.1	91	97.4	95.2	95.8
60	Iowalth Hybrid 25W (Yellow).....	81.9	78.5	4.13	16.5	93	99.6	94.0	95.4
61	Crow Hybrid 607.....	80.5	76.6	4.82	20.4	98	104.9	91.7	95.0
62	E. W. Doubet Hybrid D6.....	79.9	76.1	4.78	18.1	99	106.0	91.1	94.8
63	*E. W. Doubet Hybrid D1.....	80.4	76.8	4.51	17.3	92	98.5	92.0	93.6
64	DeKalb Hybrid 615.....	76.8	75.1	2.23	18.5	96	102.8	89.9	93.1
65	Illinois Hybrid 212 (Monier).....	80.3	73.7	8.20	16.4	98	104.9	88.3	92.4
66	*Dyar Hybrid D44R.....	77.4	73.8	4.59	17.9	96	102.8	88.4	92.0
67	Illinois Hybrid 751 (Joslin).....	77.7	76.2	1.89	18.5	86	92.1	91.3	91.5
67	Stiegelmeier Hybrid 702.....	74.8	73.2	2.08	19.5	96	102.8	87.7	91.5
69	DeKalb Hybrid 840.....	73.1	63.5	6.26	19.4	97	103.9	82.0	87.5
70	DeKalb Hybrid 825.....	72.8	68.8	5.44	20.0	97	103.9	81.7	87.2
71	Doubet Yellow Dent.....	68.5	67.1	2.00	21.4	81	86.7	80.4	82.0
72	Station Yellow Dent.....	67.5	66.6	1.29	19.5	77	82.4	79.8	80.4
73	Krug.....	64.9	62.0	4.44	19.8	75	80.3	74.3	75.8
●	Average of 5 open-pollinated varieties.....	60.7	59.6	2.03	19.9	76.8	82.2	71.3	74.1
74	Hunt White Dent.....	51.5	50.8	1.32	19.0	78	83.5	60.8	66.5
75	Roeschley Yellow Dent.....	51.9	51.3	1.10	20.0	73	78.2	61.4	65.6
	Average of all entries.....	86.8	83.6	3.72	18.9	93.4	....	....	....

*Less than 5 bushels of seed sampled.

A difference of less than 7.0 bushels between total yields of any two entries in this table is not significant.

Table 9.—WEST NORTH-CENTRAL ILLINOIS: Cambridge Summaries

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
(A) Average yield of entries grown in 1939 and 1940									
		<i>bu.</i>	<i>bu.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	
1	Pioneer Hi-Bred 313.....	119.4	114.8	4.20	20.1	93.5	102.0	115.6	112.2
2	Seeber Hybrid 11A.....	112.0	110.6	1.32	19.6	96.5	105.2	111.4	109.8
3	Illinois Hybrid 960.....	111.0	109.1	1.78	18.0	89.5	97.6	109.9	106.8
3	Morgan Hybrid M-52A.....	111.1	108.5	2.42	18.6	91.0	99.2	109.3	106.8
5	M-L Hybrid 523 (Moews-Lowe).....	109.4	106.0	3.41	18.3	97.0	105.8	106.7	106.5
6	DeKalb Hybrid 827.....	107.0	106.0	.91	17.1	94.0	102.5	106.7	105.6
7	Pioneer Hi-Bred 307.....	109.0	105.5	3.51	17.6	94.5	103.1	106.2	105.4
7	Illinois Hybrid 201.....	109.4	103.8	5.30	17.6	99.0	108.0	104.5	105.4
9	Sass Hybrid 305 (U. G. Sass).....	106.8	104.7	2.00	17.7	95.5	104.1	105.4	105.1
10	Funk Hybrid G-212.....	106.4	105.1	1.19	19.1	93.0	101.4	105.8	104.7
11	Sass Hybrid 50 (L. A. Sass).....	108.6	105.6	2.95	18.0	90.0	98.1	106.3	104.2
12	Iowaleth Hybrid 25.....	107.8	105.2	2.50	16.4	90.0	98.1	105.9	104.0
12	DeKalb Hybrid 800.....	102.6	101.8	.73	18.1	99.5	108.5	102.5	104.0
14	M-L Hybrid 514 (Moews-Lowe).....	104.8	102.8	2.09	16.7	95.5	104.1	103.5	103.6
15	U. S. Hybrid 44.....	105.4	103.4	1.98	17.5	92.6	101.0	104.1	103.3
15	Funk Hybrid G-169.....	103.8	102.0	1.68	17.7	96.5	105.2	102.7	103.3
17	U. S. Hybrid 14 (Ferris).....	106.8	103.6	3.10	18.4	90.5	98.7	104.3	102.9
18	M-L Hybrid 120 (Moews-Lowe).....	103.2	101.0	2.57	18.1	95.0	103.6	101.7	102.2
19	Funk Hybrid G-53.....	102.1	101.0	1.02	17.5	95.0	103.6	101.7	102.1
20	Illinois Hybrid 374.....	104.4	101.1	3.19	18.2	92.0	100.3	101.8	101.4
21	National Hybrid 119.....	103.2	101.0	2.56	17.8	90.5	98.7	101.7	101.0
22	E. W. Doubet Hybrid D6.....	103.3	100.4	3.23	17.4	92.0	100.3	101.1	100.9
23	E. W. Doubet Hybrid D7.....	100.8	100.1	.80	18.1	92.5	100.9	100.8	100.8
24	U. S. Hybrid 5.....	101.8	100.1	1.82	16.9	92.0	100.3	100.8	100.7
25	Funk Hybrid G-32.....	102.3	99.8	2.62	19.2	91.5	99.8	100.5	100.3
26	Funk Hybrid G-63.....	102.6	97.9	4.74	18.0	94.5	103.1	98.6	99.7
27	Morgan Hybrid M-52.....	101.8	98.6	3.38	17.6	89.5	97.6	99.3	98.9
28	DeKalb Hybrid 615.....	97.2	93.9	3.20	16.9	98.0	106.9	94.6	97.7
29	Stiegelmeier Hybrid 702.....	93.8	92.6	1.44	17.8	96.0	104.7	93.2	96.1
30	DeKalb Hybrid 825.....	91.4	89.2	2.90	18.0	98.0	106.9	89.8	94.1
31	Illinois Hybrid 751.....	93.8	90.8	2.96	17.4	91.0	99.2	91.4	93.4
32	Doubet Yellow Dent.....	87.4	84.1	3.42	20.3	80.0	87.2	84.7	85.3
33	Krug.....	84.1	80.4	4.32	19.0	76.0	82.9	81.0	81.5
●	Average of 5 open-pollinated varieties.....	80.4	78.4	2.36	18.6	77.0	84.0	78.9	80.2
34	Roeschley Yellow Dent.....	79.4	77.8	1.78	16.7	73.5	80.2	78.3	78.8
35	Hunt White Dent.....	69.4	68.9	.88	17.6	75.0	81.8	69.4	72.5
Average of all entries.....		101.8	99.3	2.51	18.0	91.7	....	....	....
(B) Average yield of entries grown in 1938, 1939, 1940									
1	Pioneer Hi-Bred 313.....	114.2	111.1	2.80	19.5	77.3	95.7	117.1	111.8
2	M-L Hybrid 523 (Moews-Lowe).....	106.2	103.1	3.04	17.4	88.8	109.9	108.6	108.9
3	DeKalb Hybrid 827.....	102.1	101.4	.62	16.6	87.8	108.7	106.8	107.3
4	M-L Hybrid 514 (Moews-Lowe).....	102.8	101.3	1.41	16.2	87.7	108.5	106.7	107.2
5	Pioneer Hi-Bred 307.....	106.1	103.1	3.05	17.0	82.5	102.1	108.6	107.0
6	U. S. Hybrid 44.....	103.9	102.3	1.57	16.8	82.3	101.9	107.8	106.3
7	Illinois Hybrid 960.....	103.9	102.4	1.42	17.1	79.5	98.4	107.9	105.5
7	Funk Hybrid G-212.....	102.2	101.2	.96	18.0	82.5	102.1	106.6	105.5
9	M-L Hybrid 120 (Moews-Lowe).....	101.0	98.5	1.92	17.3	87.5	108.3	103.8	104.9
10	Funk Hybrid G-53.....	97.8	96.6	1.16	16.7	88.0	108.9	101.8	103.6
11	Funk Hybrid G-63.....	101.5	98.2	3.28	16.8	81.8	101.2	103.5	102.9
12	National Hybrid 119.....	98.9	97.3	1.80	17.1	83.2	103.0	102.5	102.6
13	Morgan Hybrid M-52.....	97.8	95.3	2.71	16.7	84.2	104.2	100.4	101.4
14	Funk Hybrid G-32.....	97.1	95.4	1.75	18.3	81.8	101.2	100.5	100.7
15	DeKalb Hybrid 825.....	91.0	89.5	1.93	17.8	89.8	111.1	94.3	98.5
16	Illinois Hybrid 751.....	91.4	89.4	1.97	16.9	85.0	105.2	94.2	97.0
17	Doubet Yellow Dent.....	83.2	81.0	2.34	19.3	70.3	87.0	85.3	85.7
18	Krug.....	81.4	78.9	2.99	18.1	67.7	83.8	83.1	83.3
19	Roeschley Yellow Dent.....	81.0	79.8	1.30	16.4	65.0	80.4	84.1	83.2
●	Average of 5 open-pollinated varieties.....	79.8	78.4	1.70	17.9	67.8	83.9	82.6	82.9
20	Hunt White Dent.....	72.3	71.7	.81	17.1	63.5	78.6	75.6	76.4
Average of all entries.....		96.8	94.9	1.94	17.4	80.8	....	....	....

(Table 9 is concluded on page 205.)

Table 10.—WEST NORTH-CENTRAL: Cambridge, Resistance to Lodging Caused by Feeding of Corn Rootworms¹

Rank	Entry	Plants leaning 30 degrees or more ¹	Plants leaning more than 45 degrees	Resistance rating com- pared with average ² (hybrids only)	1940				Resistance rating com- pared with average ² (hybrids only)
					Rank	Entry	Plants leaning 30 degrees or more ¹	Plants leaning more than 45 degrees	
1	Ioway-Supercorn 218-H	5.6	per cent.	821	40	Illinois Hybrid 21 (Dyar)	per cent.	109	
2	M-L Hybrid 500 (Moews-Lowe)	12.3	0	371	41	Dyar Hybrid D44R	39.8	1.2	
3	Holmes Utility Hybrid 35	12.8	0	359	42	M-L Hybrid 120 (Moews-Lowe)	42.4	1.6	
4	DeKalb Hybrid 800	13.8	0	333	43	Sass Hybrid 305 (U. G. Sass)	39.8	1.9	
5	Funk Hybrid G-53	14.8	9	277	44	Ioway-Supercorn 123-H	39.0	2.1	
6	Stewart Hybrid S-22	16.5	0	277	45	U. S. Hybrid 63 (Munson)	38.9	2.9	
7	U. S. Hybrid 5 (Hulling)	16.2	3	274	46	U. S. Hybrid 44 (Sieben)	41.4	3.4	
8	Illinois Hybrid 21 (Frey)	15.0	1.2	264	47	Funk Hybrid G-32	48.1	1.5	
9	Null Hybrid N-73	18.3	3	242	48	DeKalb Hybrid 615	49.2	1.6	
10	Illinois Hybrid 600 (I.H.P.)	19.6	3	228	49	Bear Hybrid OK-72	51.1	1.5	
11	Holmes Utility Hybrid 59	20.6	0	223	50	Crow Hybrid 607	51.1	2.7	
12	E. W. Doubet Hybrid D6	21.3	6	204	51	Sass Hybrid 50 (L. A. Sass)	51.1	2.2	
13	DeKalb Hybrid 825	22.0	7	197	52	National Hybrid 119 ₄	50.3	3.8	
14	M-L Hybrid 514 (Moews-Lowe)	22.3	9	190	53	Morgan Hybrid M-52B	55.2	4.1	
15	Null Hybrid N-45	24.1	6	181	54	Lowleath Hybrid 25R	57.9	3.1	
16	Funk Hybrid G-63	25.5	3	176	55	Illinois Hybrid 960 (L. A. Sass)	59.8	2.6	
17	M-L Hybrid 523 (Moews-Lowe)	27.2	0	169	56	Illinois Hybrid 960 (L. A. Sass)	60.4	2.4	
18	Illinois Hybrid 201 (Holmes)	24.2	1.5	168	57	Illinois Hybrid 546 (Morgan)	57.8	4.5	
19	U. S. Hybrid 35 (Sieben)	26.8	3	168	58	Lowleath Hybrid 25W (Yellow)	61.4	3.3	
20	Hahn Hybrid 150A	26.7	6	164	59	Hunting Hybrid 380	60.9	3.9	
21	M-L Hybrid 528 (Moews-Lowe)	27.8	3	162	60	National Hybrid 129	54.5	7.4	
22	DeKalb Hybrid 827	27.4	6	161	61	Illinois Hybrid 374 (Macon Co. Seed Co.)	62.2	3.5	
23	Illinois Hybrid 212 (Monier)	28.1	3	160	62	Pioneer Hi-Bred 313	66.9	1.8	
24	Bear Hybrid OK-46	28.2	1.2	150	63	Funk Hybrid G-212	63.7	6.5	
25	DeKalb Hybrid 840	28.5	1.3	147	64	Pioneer Hi-Bred 334	69.7	4.4	
26	Richbred Hybrid 381	32.8	0	140	65	Morgan Hybrid M-52	74.7	4.3	
27	E. W. Doubet Hybrid D7	27.9	2.5	139	66	U. S. Hybrid 35 (Fertis)	71.4	14.6	
28	U. S. Hybrid 35 (Fertis)	30.9	1.5	135	67	Illinois Hybrid 751 (Joslin)	85.0	9.8	
29	Funk Hybrid G-169	32.1	1.3	132	68	Morgan Hybrid N-52A	86.4	8.8	
30	Sass Hybrid 40 (U. G. Sass)	34.5	6	128	69	Illinois Hybrid 17 (L. A. Sass)	83.0	13.4	
31	Stegelmeyer Hybrid 702	35.9	0	128	70	Illinois Hybrid 350 (I.H.P.)	85.8	11.8	
32	Seebler Hybrid 11A	35.6	3	127		Lowleath Hybrid 25	89.6	16.4	
33	U. S. Hybrid 44 (Fertis)	35.6	3	124		Average of hybrid entries	40.9	2.5	
34	Pioneer Hi-Bred 332	38.3	0	120					
35	Pioneer Hi-Bred 307	38.1	0	120	71	Roeschley Yellow Dent	92.8	35.4	
36	Illinois Hybrid 201 (C. Doubet & Son)	37.0	9	119	72	Doubet Yellow Dent	77.5	12.0	
37	U. S. Hybrid 44 (Morgan)	39.3	6	113	73	Krug	92.1	24.8	
38	E. W. Doubet Hybrid D1	36.8	2.2	112	74	Hunt White Dent	92.7	29.5	
39	Pioneer Hi-Bred 333	38.2	1.8	110	75	Station Yellow Dent	98.3	29.4	

¹*Diabrotica duodecimpunctata* (F.) and *Diabrotica longicornis* (Say). ²A difference of less than 5.5 in this column is not significant. ³High rating indicates better standing ability.

Table 11.—WEST NORTH-CENTRAL ILLINOIS: Cambridge, Summary of Lodging Caused by Feeding of Corn Rootworms¹

Rank	Entry	Plants leaning 30 degrees or more	Plants leaning 45 degrees or more	Resistance rating com- pared with average ² (hybrids only)	Plants leaning 30 degrees or more
Average of 1939 and 1940					Average of 1937, 1939, 1940
		perct.	perct.		perct.
1	DeKalb Hybrid 800.....	7.8	.1	408	....
2	U. S. Hybrid 5.....	11.9	.6	247	....
3	Funk Hybrid G-53.....	12.2	1.0	230	....
4	M-L Hybrid 514 (Moews-Lowe).....	12.4	.9	230	....
5	DeKalb Hybrid 825.....	13.6	.3	230	24.5
6	M-L Hybrid 523 (Moews-Lowe).....	15.7	0	206	....
7	Funk Hybrid G-169.....	18.6	.6	165	....
8	Seeber Hybrid 11A.....	19.1	.3	165	....
9	Pioneer Hi-Bred 307.....	19.8	0	165	26.4
10	DeKalb Hybrid 827.....	19.6	.7	165	....
11	Illinois Hybrid 201.....	20.5	.6	160	....
12	Funk Hybrid G-63.....	21.2	.6	146	....
13	Sass Hybrid 305.....	23.2	1.2	127	....
14	DeKalb Hybrid 615.....	25.7	.8	119	....
15	Stiegelmeier Hybrid 702.....	28.2	.4	112	....
16	Funk Hybrid G-32.....	28.4	.8	109	....
17	U. S. Hybrid 44.....	35.2	.5	90	38.8
18	Funk Hybrid G-212.....	34.2	3.1	81	39.8
19	National Hybrid 119.....	35.4	2.4	81	....
20	Pioneer Hi-Bred 313.....	38.7	.9	80	....
21	Illinois Hybrid 374.....	37.1	2.1	79	....
22	M-L Hybrid 120 (Moews-Lowe).....	33.9	2.8	78	....
23	Morgan Hybrid M-52.....	38.3	2.3	76	42.3
24	Sass Hybrid 50.....	38.1	3.0	74	....
25	Illinois Hybrid 960.....	39.9	1.9	74	43.5
26	U. S. Hybrid 14.....	42.8	7.8	56	....
27	Morgan Hybrid M-52A.....	50.1	4.5	55	....
28	Iowa Hybrid 25.....	50.2	8.6	48	49.6
29	Illinois Hybrid 751.....	55.9	6.5	47	65.2
	Average of hybrid entries.....	29.0	1.8	100	41.2
30	Doubet Yellow Dent.....	63.9	9.0	...	71.3
31	Krug.....	72.6	15.8	...	79.1
32	Hunt White Dent.....	79.9	25.5	...	...
33	Roeschley Yellow Dent.....	80.7	25.6	...	83.7

¹*Diabrotica duodecimpunctata* (F.) and *Diabrotica longicornis* (Say).²Average resistance of all hybrids = 100. High rating indicates increased standing ability.

Table 12.—EAST NORTH-CENTRAL ILLINOIS: Reddick

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
	1940	bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	Pioneer Hi-Bred 334.....	90.2	89.1	1.24	20.3	99	100.8	116.5	112.6
2	Holmes Utility Hybrid 69.....	89.1	88.2	.97	23.0	100	101.8	115.3	111.9
3	Pioneer Hi-Bred 313.....	90.4	88.2	2.40	24.8	96	97.7	115.3	110.9
4	Iowaleth Hybrid 25R.....	87.0	86.9	.10	21.2	98	99.8	113.6	110.2
5	Hoosier Crost Hybrid 668-L.....	87.7	86.6	1.29	23.0	99	100.8	113.2	110.1
6	Illinois Hybrid 21 (Frey).....	87.2	85.7	1.74	22.1	100	101.8	112.0	109.5
7	U. S. Hybrid 35 (Ferris).....	85.1	84.8	.32	22.4	100	101.8	110.9	108.6
8	Illinois Hybrid 972 (Holmes).....	84.7	84.4	.36	22.6	100	101.8	110.3	108.2
9	DeKalb Hybrid 628.....	87.6	85.1	2.87	21.2	97	98.7	111.2	108.1
10	Illinois Hybrid 246 (L.H.P.).....	84.7	84.0	.88	23.0	100	101.8	109.8	107.8
11	Sass Hybrid 305 (U. G. Sass).....	86.4	83.9	2.88	22.8	100	101.8	109.7	107.7
12	Sass Hybrid 17 (U. G. Sass).....	85.4	84.0	1.61	21.2	99	100.8	109.8	107.6
12	Iowaleth Hybrid 25.....	84.2	84.0	.18	20.6	99	100.8	109.8	107.6
14	U. S. Hybrid 14 (Ferris).....	85.8	83.6	2.54	21.8	99	100.8	109.3	107.2
15	Pioneer Hi-Bred 333.....	84.1	83.0	1.	20.2	100	101.8	108.5	106.8
16	Sass Hybrid 50 (L. A. Sass).....	84.7	84.2	.6	22.1	94	95.7	110.1	106.5
17	Iowaleth Hybrid C1.....	84.6	83.1	1.79	21.8	98	99.8	108.6	106.4
18	Van Horn Hybrid 22.....	83.2	82.3	1.09	22.8	99	100.8	107.6	105.9
19	Funk Hybrid G-212.....	84.4	82.2	2.57	23.2	98	99.8	107.5	105.6
20	Pioneer Hi-Bred 300.....	83.4	81.5	2.22	24.5	100	101.8	106.5	105.3
21	U. S. Hybrid 45 (L. A. Sass).....	83.2	81.4	2.18	22.8	99	100.8	106.4	105.0
22	Pioneer Hi-Bred 332.....	81.8	81.1	.80	26.6	99	100.8	106.0	104.7
23	Hulting Hybrid 381.....	80.7	80.6	.15	20.3	100	101.8	105.4	104.5
24	Hahn Hybrid 150A.....	82.3	81.3	1.17	26.0	97	98.7	106.3	104.4
25	DeKalb Hybrid 821B.....	81.4	80.6	1.01	23.8	99	100.8	105.4	104.2
26	Hulting Hybrid 366.....	81.3	80.0	1.55	21.2	100	101.8	104.6	103.9
27	Bear Hybrid OK-70.....	83.2	80.2	3.65	21.8	99	100.8	104.8	103.8
28	U. S. Hybrid 5 (Stewart).....	80.4	79.9	.63	22.4	98	99.8	104.5	103.3
29	Sass Hybrid 40 (L. A. Sass).....	80.3	79.6	.88	23.0	99	100.8	104.1	103.3
30	Richbred Hybrid 442.....	79.7	79.0	.85	26.6	100	101.8	103.4	103.0
31	Illinois Hybrid 201 (Hahn).....	79.4	79.2	.25	24.3	99	100.8	103.5	102.8
32	M-L Hybrid 514 (Moews-Lowe).....	79.4	78.8	.72	21.5	100	101.8	103.0	102.7
33	U. S. Hybrid 13 (Monier).....	79.6	78.6	1.30	26.0	100	101.8	102.7	102.5
34	U. S. Hybrid 63 (Coldwater).....	80.3	78.1	2.75	21.8	100	101.8	102.1	102.0
35	M-L Hybrid 523 (Moews-Lowe).....	78.3	77.8	.58	24.8	100	101.8	101.7	101.7
36	Sass Hybrid 30 (U. G. Sass).....	78.4	78.2	.28	19.6	98	99.8	102.2	101.6
37	Crow Hybrid 638.....	77.7	77.2	.68	21.5	100	101.8	100.9	101.1
37	Funk Hybrid G-77.....	78.5	77.1	1.77	23.6	100	101.8	100.8	101.1
39	Bear Hybrid OK-69.....	77.0	76.8	.23	21.2	100	101.8	100.4	100.8
40	Pioneer Hi-Bred 307.....	82.7	78.9	4.60	22.4	92	93.6	103.1	100.7
41	Illinois Hybrid 247 (Canterbury).....	77.6	76.6	1.28	24.5	100	101.8	100.1	100.5
42	DeKalb Hybrid 817.....	76.3	76.0	.37	21.8	100	101.8	99.3	99.9
43	E. W. Doubet Hybrid D4.....	77.4	76.6	1.02	21.2	97	98.7	100.1	99.8
44	Holmes Utility Hybrid 35.....	75.8	74.8	1.35	21.8	100	101.8	97.8	98.8
45	U. S. Hybrid 44 (Frey).....	75.1	74.7	.55	24.0	100	101.8	97.6	98.6
46	U. S. Hybrid 44 (Gentert).....	74.7	74.4	.41	23.4	99	100.8	97.3	98.2
46	Pioneer Hi-Bred 330.....	74.4	74.2	.21	20.6	100	101.8	97.0	98.2
48	Crow Hybrid 607.....	75.3	74.1	1.61	26.8	100	101.8	96.9	98.1
49	DeKalb Hybrid 615.....	74.4	73.9	.65	20.3	99	100.8	96.6	97.6
49	Funk Hybrid G-53.....	76.1	73.6	3.31	21.8	100	101.8	96.2	97.6
51	DeKalb Hybrid 800.....	74.9	73.5	1.88	24.0	100	101.8	96.1	97.5
52	Funk Hybrid G-32.....	75.6	73.7	2.56	22.6	99	100.8	96.3	97.4
53	M-L Hybrid 500 (Moews-Lowe).....	76.6	73.4	4.19	26.0	99	100.8	95.9	97.1
54	Bear Hybrid OK-79.....	73.7	72.9	1.13	22.4	100	101.8	95.3	96.9
55	DeKalb Experimental Hybrid 61.....	75.2	72.7	3.28	23.6	100	101.8	95.0	96.7
56	Stiegelmeier Hybrid 380.....	73.4	72.7	.91	25.3	99	100.8	95.0	96.4
57	Sibley Farms Hybrid 753B.....	74.1	72.5	2.14	22.1	99	100.8	94.8	96.3
58	E. W. Doubet Hybrid D8.....	72.6	72.1	.65	23.6	100	101.8	94.2	96.1
59	M-L Hybrid 528 (Moews-Lowe).....	76.6	71.9	6.20	22.1	99	100.8	94.0	95.7
60	M-L Hybrid 120 (Moews-Lowe).....	73.8	71.4	3.28	22.4	100	101.8	93.3	95.4
61	Funk Hybrid G-63.....	71.4	70.9	.68	25.0	100	101.8	92.7	95.0
62	Funk Hybrid G-169.....	72.4	71.4	1.42	22.8	98	99.8	93.3	94.9
63	Miller Hybrid 1050 (W).....	71.8	70.9	1.28	26.0	97	98.7	92.7	94.2
64	National Hybrid 119A.....	70.8	69.5	1.88	20.3	98	99.8	90.9	93.1
65	Stiegelmeier Hybrid 702.....	69.0	68.2	1.09	22.1	99	100.8	89.2	92.1
66	Funk Hybrid G-535 (W).....	68.2	67.8	.53	24.3	100	101.8	88.6	91.9
67	DeKalb Hybrid 606.....	68.4	68.2	.34	23.2	97	98.7	89.2	91.6
68	M-L Hybrid 550 (Moews-Lowe).....	69.1	66.7	3.46	22.6	99	100.8	87.2	90.6
69	Krug.....	72.0	70.3	2.40	23.8	83	84.5	91.9	90.1
70	Crow Hybrid 501 (W).....	63.4	63.0	.61	23.6	97	98.7	82.4	86.5
71	Miller Hybrid 1047 (W).....	62.5	61.4	1.72	21.2	92	93.6	80.3	83.6
72	Station Yellow Dent.....	60.8	60.6	.36	26.8	94	95.7	79.2	83.3
73	● Average of 5 open-pollinated varieties.....	62.0	61.0	1.50	24.9	80.4	91.0	79.8	82.6
73	Doubet Yellow Dent.....	60.1	58.8	2.08	27.8	94	95.7	76.9	81.6
74	Roeschley Yellow Dent.....	61.8	60.2	2.58	24.3	87	88.6	78.7	81.2
75	Hunt White Dent.....	55.3	55.2	.10	22.1	89	90.6	72.2	76.8
	Average of all entries.....	77.7	76.6	1.50	23.0	98.4	....	....	....

*Less than 5 bushels of seed sampled. ¹Average of 9 plots instead of 10.

A difference of less than 9.1 bushels between total yields of any two entries in this table is not significant.

Table 13.—EAST NORTH-CENTRAL ILLINOIS: Reddick Summaries

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
(A) Average yield of entries grown in 1939 and 1940									
		<i>bu.</i>	<i>bu.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	
1	Pioneer Hi-Bred 313.....	87.0	85.5	1.76	18.0	94.5	97.8	111.0	107.7
2	U. S. Hybrid 14 (Ferris).....	85.8	83.8	2.31	16.8	99.5	103.0	108.8	107.4
3	Illinois Hybrid 972 (Holmes).....	84.5	83.9	.73	17.6	98.5	102.0	109.0	107.2
4	Iowaleath Hybrid 25.....	83.8	83.4	.31	16.1	98.5	102.0	108.3	106.7
5	DeKalb Hybrid 628.....	84.5	83.2	1.52	16.4	96.0	99.4	108.1	105.9
6	Iowaleath Hybrid CI.....	84.1	82.9	1.38	16.8	96.5	99.9	107.7	105.8
7	Sass Hybrid 50 (L. A. Sass).....	82.6	82.2	.57	17.1	94.5	97.8	106.8	104.6
8	Funk Hybrid G-212.....	82.6	81.4	1.42	17.6	98.0	101.4	105.7	104.6
9	Bear Hybrid OK-69.....	81.4	81.1	.33	17.5	98.5	102.0	105.3	104.5
10	Bear Hybrid OK-70.....	82.6	80.9	2.12	18.1	99.0	102.5	105.1	104.4
11	M-L Hybrid 514 (Moews-Lowe).....	81.1	80.7	.46	16.6	99.5	103.0	104.8	104.4
12	M-L Hybrid 523 (Moews-Lowe).....	81.8	80.8	1.18	19.3	99.0	102.5	104.9	104.3
13	Funk Hybrid G-32.....	81.1	80.0	1.41	17.0	98.5	102.0	103.9	103.4
14	U. S. Hybrid 13.....	80.8	79.8	1.27	19.6	98.5	102.0	103.6	103.2
15	U. S. Hybrid 35.....	79.9	79.4	.54	17.2	99.5	103.0	103.1	103.1
16	U. S. Hybrid 5.....	80.2	80.0	.34	17.1	97.0	100.4	103.9	103.0
17	U. S. Hybrid 45 (L. A. Sass).....	80.6	79.4	1.52	17.4	96.5	99.9	103.1	102.3
18	U. S. Hybrid 63.....	78.6	76.6	2.70	16.6	100.0	103.5	99.5	100.5
19	Pioneer Hi-Bred 307.....	80.2	78.1	2.53	17.0	94.0	97.3	101.4	100.4
20	Sass Hybrid 40.....	77.7	77.0	.88	17.4	97.5	100.9	100.0	100.2
21	DeKalb Hybrid 615.....	76.4	76.2	.42	15.8	99.5	103.0	99.0	100.0
22	Funk Hybrid G-169.....	76.6	75.6	1.42	17.8	99.0	102.5	98.2	99.3
23	Stiegelmeier Hybrid 380.....	76.4	76.0	.56	19.1	97.5	100.9	98.7	99.2
24	U. S. Hybrid 44.....	76.3	75.8	.65	17.9	98.2	101.7	98.4	99.2
25	E. W. Doubet Hybrid D8.....	76.1	74.5	1.96	17.4	100.0	103.5	96.8	98.5
26	Sibley Farms Hybrid 753B.....	76.1	75.0	1.42	17.5	97.5	100.9	97.4	98.3
27	Stiegelmeier Hybrid 702.....	74.8	74.4	.66	16.8	99.5	103.0	96.6	98.2
28	E. W. Doubet Hybrid D4.....	75.4	74.7	.86	16.2	97.5	100.9	97.0	98.0
29	Pioneer Hi-Bred 330.....	72.2	72.0	.41	15.8	100.0	103.5	93.5	96.0
30	DeKalb Hybrid 606.....	71.5	71.2	.35	18.5	96.0	99.4	92.5	94.2
31	Krug.....	71.4	70.2	1.72	19.6	86.0	89.0	91.2	90.6
32	Crow Hybrid 501 (W).....	68.4	67.9	.74	17.6	94.0	97.3	88.2	90.5
33	Roeschley Yellow Dent.....	67.4	66.5	1.42	18.7	86.5	89.5	86.4	87.2
34	Doubet Yellow Dent.....	66.4	65.4	1.51	19.6	80.5	93.7	84.9	87.1
●	Average of 5 open-pollinated varieties.....	65.6	64.8	1.06	19.2	87.9	91.0	84.2	85.9
35	Hunt White Dent.....	59.9	59.6	.45	16.9	85.0	88.0	77.4	80.1
Average of all entries.....		77.9	77.0	1.14	17.5	96.6	....	....	....
(B) Average yield of entries grown in 1938, 1939, 1940									
1	Pioneer Hi-Bred 313.....	84.0	82.5	1.67	16.5	88.0	102.1	113.9	111.0
2	M-L Hybrid 514 (Moews-Lowe).....	80.1	79.8	.43	15.3	94.0	109.0	110.2	109.9
3	M-L Hybrid 523 (Moews-Lowe).....	77.8	77.1	.80	17.5	90.6	105.1	106.5	106.2
4	DeKalb Hybrid 628.....	78.7	77.9	1.02	15.8	87.5	101.5	107.6	106.1
5	Funk Hybrid G-212.....	78.8	77.1	2.21	15.8	90.3	104.8	106.5	106.1
6	Iowaleath Hybrid CI.....	78.1	77.1	1.34	15.8	90.5	105.0	106.5	106.1
7	Funk Hybrid G-32.....	76.6	75.8	1.10	15.8	92.2	107.0	104.7	105.3
8	Pioneer Hi-Bred 307.....	77.9	76.4	1.84	15.7	87.3	101.3	105.5	104.4
9	U. S. Hybrid 35.....	74.4	73.5	1.31	16.4	92.7	107.5	101.5	103.0
10	U. S. Hybrid 44.....	73.4	72.9	.61	16.5	89.9	104.3	100.7	101.6
11	DeKalb Hybrid 606.....	71.6	71.1	.71	17.1	85.7	99.4	98.2	98.5
12	Krug.....	66.3	65.4	1.26	18.4	73.8	85.6	90.3	89.1
13	Roeschley Yellow Dent.....	64.9	64.2	1.12	17.8	76.8	89.1	88.7	88.8
●	Average of 5 open-pollinated varieties.....	61.8	61.0	1.27	18.0	77.3	89.7	84.3	85.6
14	Doubet Yellow Dent.....	60.7	59.5	2.10	17.8	80.2	93.0	82.2	84.9
15	Hunt White Dent.....	57.4	56.5	1.56	16.2	73.3	85.0	78.0	79.8
Average of all entries.....		73.4	72.4	1.27	16.6	86.2	....	....	....
(C) Average yield of entries grown in 1937, 1938, 1939, 1940									
1	Funk Hybrid G-212.....	76.7	75.4	1.70	15.6	86.5	108.3	107.7	107.8
2	Pioneer Hi-Bred 307.....	76.9	75.7	1.44	15.4	84.5	105.8	108.1	107.5
3	DeKalb Hybrid 628.....	76.3	75.5	.97	15.9	82.4	103.1	107.9	106.7
4	Funk Hybrid G-32.....	74.5	73.9	.83	15.8	87.9	110.0	105.6	106.7
5	U. S. Hybrid 44.....	72.9	72.5	.51	16.4	85.2	106.6	103.6	104.4
6	DeKalb Hybrid 606.....	69.2	68.8	.54	16.8	79.8	99.9	98.3	98.7
7	Roeschley Yellow Dent.....	64.2	63.7	.91	17.8	75.6	94.6	91.0	91.9
8	Krug.....	66.0	65.4	.95	18.4	64.9	81.2	93.4	90.4
●	Average of 5 open-pollinated varieties.....	61.3	60.7	1.00	18.1	71.0	88.9	86.7	87.2
9	Doubet Yellow Dent.....	60.2	59.2	1.68	17.9	72.1	90.2	84.6	86.0
Average of all entries.....		70.8	70.0	1.06	16.7	79.9	....	....	....

(Table 13 is concluded on page 205.)

Table 14.—WEST-CENTRAL ILLINOIS: Littleton

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
1940		bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	*Illinois Hybrid 247 (I.H.P.)	94.0	93.3	.72	18.0	100	100.4	114.6	111.1
2	Pioneer Hi-Bred 332	92.5	92.2	.36	21.0	100	100.4	113.3	110.1
3	Illinois Hybrid 877 (Burrus)	92.0	91.5	.52	15.8	100	100.4	112.4	109.4
4	Illinois Hybrid 960 (L. A. SaaS)	92.3	91.5	.82	18.0	98	98.4	112.4	108.9
5	Morgan Hybrid M-52A	91.4	90.3	1.17	18.0	100	100.4	110.9	108.3
6	U. S. Hybrid 13 (Huey Seed Co.)	90.9	90.2	.82	17.2	100	100.4	110.8	108.2
7	*Illinois Hybrid 246 (I.H.P.)	91.1	89.6	1.66	18.5	100	100.4	110.1	107.7
8	Pioneer Hi-Bred 313	89.5	88.1	1.60	20.0	99	99.4	108.2	106.0
9	Illinois Hybrid 805 (Holmes)	88.1	87.5	.73	18.5	100	100.4	107.5	105.7
10	Illinois Hybrid 201 (Wilson)	87.4	87.3	.15	17.5	100	100.4	107.2	105.5
11	U. S. Hybrid 14 (Ferris)	87.6	87.2	.42	19.0	100	100.4	107.1	105.4
12	Illinois Hybrid 21 (Huey Seed Co.)	87.1	86.7	.42	17.2	100	100.4	106.5	105.0
12	Null Hybrid N-54	87.1	86.7	.41	19.4	100	100.4	106.5	105.0
14	Illinois Hybrid 499 (Wilson)	86.8	86.6	.22	20.7	99	99.4	106.4	104.6
15	Null Hybrid N-16	87.5	86.2	1.51	17.5	100	100.4	105.9	104.5
15	U. S. Hybrid 35 (Huey Seed Co.)	86.7	86.2	.57	16.9	100	100.4	105.9	104.5
15	*Richbred Hybrid 381	86.4	86.2	.23	18.8	100	100.4	105.9	104.5
18	Funk Hybrid G-212	85.9	85.8	.15	19.4	100	100.4	105.4	104.2
19	*Pioneer Hi-Bred 300	86.2	85.5	.76	19.4	100	100.4	105.0	103.8
20	DeKalb Experimental Hybrid 83	86.2	84.9	1.52	19.4	100	100.4	104.3	103.3
21	Bear Hybrid OK-72	86.9	84.7	2.51	17.5	100	100.4	104.1	103.2
22	U. S. Hybrid 35 (Ferris)	86.0	84.3	1.93	17.5	100	100.4	103.6	102.8
23	Crow Hybrid 607	84.2	83.9	.39	19.0	100	100.4	103.1	102.4
24	Crow Hybrid 608	84.2	83.8	.52	15.9	100	100.4	102.9	102.3
25	U. S. Hybrid 13 (C. Doubet & Son)	85.0	83.6	1.60	18.8	100	100.4	102.7	102.1
25	M-L Hybrid 523 (Moews-Lowe)	83.9	83.6	.33	18.8	100	100.4	102.7	102.1
25	M-L Hybrid 500 (Moews-Lowe)	84.4	83.5	1.01	21.0	100	100.4	102.6	102.1
25	Stiegelmeier Hybrid 38	84.3	83.5	.94	19.0	100	100.4	102.6	102.1
29	DeKalb Hybrid 827	84.2	83.3	1.03	17.5	100	100.4	102.3	101.8
29	Iowaleth Hybrid 29A	83.7	83.2	.65	18.3	100	100.4	102.2	101.8
31	Ill. Hybrid 201 (Macon Co. Seed Co.)	83.8	83.0	.92	18.3	100	100.4	102.0	101.6
32	U. S. Hybrid 35 (Burrus)	85.7	82.6	3.60	17.8	100	100.4	101.5	101.2
32	*Bear Hybrid OK-42	82.8	82.6	.28	19.0	100	100.4	101.5	101.2
32	*Holmes Utility Hybrid 69	83.8	82.5	1.50	17.2	100	100.4	101.4	101.2
32	Seeber Hybrid 45	83.3	82.5	1.00	20.4	100	100.4	101.4	101.2
36	*E. W. Doubet Hybrid D49	83.3	82.8	.61	20.0	99	99.4	101.7	101.1
37	DeKalb Hybrid 816	82.7	82.1	.75	19.4	100	100.4	100.9	100.8
38	Kelly Hybrid K-374	82.2	81.5	.89	16.9	100	100.4	100.1	100.2
39	Illinois Hybrid 200 (Mountjoy)	81.5	80.9	.68	17.5	100	100.4	99.4	99.6
40	*Pioneer Hi-Bred 336	83.1	80.6	3.02	19.0	100	100.4	99.0	99.4
40	U. S. Hybrid 5 (Mountjoy)	81.0	80.6	.46	17.8	100	100.4	99.0	99.4
42	Pioneer Hi-Bred 307	85.6	80.5	6.01	17.2	100	100.4	98.9	99.3
43	Macon Hybrid 666	82.6	79.5	3.74	17.8	100	100.4	97.7	98.4
43	M-L Hybrid 514 (Moews-Lowe)	80.9	79.5	1.74	17.2	100	100.4	97.7	98.4
45	Hulting Hybrid 380	79.7	79.2	.65	19.7	100	100.4	97.3	98.1
46	Kelly Hybrid K-100	79.5	79.0	.67	18.2	100	100.4	97.1	97.9
47	Pioneer Hi-Bred 333	80.5	78.9	1.95	16.9	100	100.4	96.9	97.8
47	Funk Hybrid G-90	80.1	78.9	1.50	18.9	100	100.4	96.9	97.8
47	Illinois Hybrid 546 (Morgan)	79.1	78.9	.20	19.0	100	100.4	96.9	97.8
50	Bear Hybrid OK-79	79.5	79.2	.37	16.7	98	98.4	97.3	97.6
50	Funk Hybrid G-53	79.0	78.7	.43	17.8	100	100.4	96.7	97.6
52	DeKalb Hybrid 847	80.2	78.5	2.06	18.8	100	100.4	96.4	97.4
53	Holmes Utility Hybrid 35	80.6	78.6	2.47	17.2	99	99.4	96.6	97.3
53	*Null-Vollmer Hybrid NV-47	79.2	78.4	1.01	18.3	100	100.4	96.3	97.3
55	National Hybrid 129	78.3	77.8	.67	18.7	100	100.4	95.6	96.8
56	Stiegelmeier Hybrid 901	78.8	77.6	1.50	16.6	100	100.4	95.3	96.6
57	Doubet Yellow Dent	78.3	78.0	.35	19.2	98	98.4	95.8	96.4
57	Illinois Hybrid 126 (Oakes)	79.7	77.3	2.99	18.7	100	100.4	95.0	96.4
57	DeKalb Hybrid 899	77.6	77.3	.42	22.4	100	100.4	95.0	96.4
60	*E. W. Doubet Hybrid CR-47	77.5	76.8	.87	17.5	100	100.4	94.3	95.8
61	Hulting Hybrid 366	77.4	76.4	1.35	18.7	100	100.4	93.9	95.5
62	Iowaleth Hybrid 29B	77.3	76.3	1.25	19.8	100	100.4	93.7	95.4
63	Null-Vollmer Hybrid NV-97 (Vollmer)	76.2	76.1	.08	17.5	100	100.4	93.5	95.2
64	Funk Hybrid G-94	7	75.8	.39	20.4	100	100.4	93.1	94.9
64	Funk Hybrid G-81	76.0	75.8	.25	19.5	100	100.4	93.1	94.9
66	DeKalb Hybrid 888	75.6	75.3	.43	19.5	100	100.4	92.5	94.5
67	E. W. Doubet Hybrid D10	76.6	75.1	1.96	19.4	100	100.4	92.3	94.3
68	Funk Hybrid G-169	75.1	74.7	.58	17.3	100	100.4	91.8	94.0
69	Canterbury Yellow Dent	75.3	74.6	.98	21.3	99	99.4	91.6	93.6
70	Station Yellow Dent	75.5	75.2	.44	20.4	94	94.4	92.4	92.9
71	● Average of 5 open-pollinated varieties	75.1	74.5	.81	20.5	96.4	96.8	91.5	92.9
71	Mountjoy Utility Dent	74.8	74.2	.85	20.7	96	96.4	91.2	92.5
71	Morgan Hybrid M-180	73.6	73.2	.56	19.3	100	100.4	89.9	92.5
73	M-L Hybrid 830 (Moews-Lowe)	72.3	71.7	.85	19.7	100	100.4	88.1	91.2
74	Sommer Yellow Dent	71.6	70.6	1.44	23.0	95	95.4	86.7	88.9
75	*Bear Hybrid OK-59	66.8	66.4	.57	22.8	100	100.4	81.6	86.3
Average of all entries		82.3	81.4	1.08	18.7	99.6	....	....	....

*Less than 5 bushels of seed sampled.

A difference of less than 5.6 bushels between total yields of any two entries in this table is not significant.

Table 15.—WEST-CENTRAL ILLINOIS: Littleton Summaries

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.

(A) Average yield of entries grown in 1939 and 1940

		bu.	bu.	perct.	perct.	perct.	perct.		
1	Null Hybrid N-16.....	95.4	93.6	1.96	15.0	99.5	103.8	106.9	106.1
2	Null Hybrid N-54.....	94.2	93.6	.60	16.2	97.0	101.2	106.9	105.5
3	Bear Hybrid OK-79.....	93.1	92.6	.40	14.6	98.5	102.7	105.7	105.0
4	U. S. Hybrid 13.....	93.1	92.4	.78	15.4	97.8	102.0	105.5	104.6
5	Bear Hybrid OK-72.....	93.2	91.8	1.50	19.8	98.5	102.7	104.8	104.3
6	Illinois Hybrid 201.....	92.0	91.5	.52	15.8	95.5	99.6	104.5	103.3
7	Stiegelmeier Hybrid 38.....	90.7	90.0	.80	16.0	99.5	103.8	102.7	103.0
8	Funk Hybrid G-80.....	92.1	90.4	1.83	17.1	97.0	101.2	103.2	102.7
9	Crow Hybrid 607.....	91.7	91.4	.30	16.2	93.0	97.0	104.3	102.5
9	U. S. Hybrid 14 (Ferris).....	90.3	89.9	.41	16.2	98.0	102.2	102.6	102.5
11	Illinois Hybrid 200.....	90.8	90.2	.57	15.6	96.5	100.6	103.0	102.4
12	Funk Hybrid G-212.....	90.2	89.6	.70	15.9	98.0	102.2	102.3	102.3
13	U. S. Hybrid 5 (Mountjoy).....	89.8	89.1	.72	15.4	98.5	102.7	101.7	102.0
14	DeKalb Hybrid 816.....	90.4	89.1	1.48	16.3	98.0	102.2	101.7	101.8
14	DeKalb Hybrid 827.....	89.7	88.9	.89	15.0	98.5	102.7	101.5	101.8
16	U. S. Hybrid 35.....	89.6	88.6	1.21	14.5	98.8	103.0	101.1	101.6
16	Kelly Hybrid K-100.....	89.4	88.4	1.08	16.2	99.5	103.8	100.9	101.6
18	Funk Hybrid G-81.....	89.1	88.0	1.08	17.1	97.0	101.2	100.5	100.7
19	Illinois Hybrid 499.....	89.3	89.0	.31	17.2	93.8	97.8	101.6	100.6
20	E. W. Doubet Hybrid CR-47.....	88.6	87.6	1.07	15.2	97.5	101.7	100.0	100.4
21	Null-Vollmer Hybrid NV-97.....	87.8	87.6	.13	14.8	97.0	101.2	100.0	100.2
22	Stiegelmeier Hybrid 901.....	87.2	86.6	.87	14.0	99.0	103.2	98.9	100.3
23	Crow Hybrid 608.....	86.8	86.4	.52	14.2	98.5	102.7	98.6	99.6
24	Pioneer Hi-Bred 313.....	90.1	89.2	1.03	16.2	88.5	92.3	101.8	99.4
24	DeKalb Hybrid 888.....	87.2	86.8	.43	16.5	96.0	100.1	99.1	99.4
26	Funk Hybrid G-53.....	86.4	86.1	.36	15.0	98.0	102.2	98.3	99.3
27	Illinois Hybrid 126 (Oakes).....	88.0	86.5	1.80	15.8	96.5	100.6	98.7	99.2
28	Illinois Hybrid 960.....	88.2	87.2	1.11	15.1	93.2	97.2	99.5	98.9
29	Pioneer Hi-Bred 307.....	88.9	85.8	3.62	14.8	97.0	101.2	97.9	98.7
29	Funk Hybrid G-94.....	85.2	85.0	.37	17.6	99.5	103.8	97.0	98.7
31	E. W. Doubet Hybrid D10.....	84.7	83.6	1.38	16.2	99.0	103.2	95.4	97.4
32	M-L Hybrid 514 (Moews-Lowe).....	84.6	83.6	1.10	14.7	98.0	102.2	95.4	97.1
33	Doubet Yellow Dent.....	85.0	83.8	1.20	16.3	99.0	92.8	95.7	95.0
34	Station Yellow Dent.....	81.6	80.9	.84	17.4	88.5	92.3	92.4	92.4
●	Average of 5 open-pollinated varieties.....	81.3	80.5	.97	17.4	87.3	91.0	91.9	91.7
35	Mountjoy Utility Dent.....	81.5	80.7	1.01	17.2	86.5	90.2	92.1	91.6
36	Canterbury Yellow Dent.....	80.0	79.2	1.00	18.3	90.0	93.9	90.4	91.3
37	Sommer Yellow Dent.....	78.5	77.9	.82	19.2	82.5	86.0	88.9	88.2
Average of all entries.....		88.5	87.6	.97	16.1	95.9	....	....	....

(B) Average yield of entries grown in 1938, 1939, 1940

1	U. S. Hybrid 13.....	84.9	84.1	.99	16.5	84.0	107.4	110.4	109.6
2	U. S. Hybrid 35.....	81.4	80.4	1.20	15.8	84.7	108.3	105.5	106.2
3	Funk Hybrid G-212.....	81.1	80.5	.79	16.2	81.5	104.2	105.6	105.2
4	DeKalb Hybrid 827.....	80.1	79.1	1.31	15.8	84.3	107.8	103.8	104.8
5	Pioneer Hi-Bred 313.....	81.1	80.4	.77	16.0	72.7	93.0	105.5	103.4
6	U. S. Hybrid 5.....	79.6	78.6	1.31	15.7	81.3	104.0	103.1	103.3
7	M-L Hybrid 514 (Moews-Lowe).....	79.1	78.1	1.34	15.2	82.3	105.2	102.5	103.2
8	Pioneer Hi-Bred 307.....	80.6	78.2	3.03	15.5	80.3	102.7	102.6	102.6
8	Funk Hybrid G-94.....	77.4	76.8	.91	17.9	84.3	107.8	100.8	102.6
10	Illinois Hybrid 960.....	79.1	78.1	1.24	15.6	78.0	99.7	102.5	101.8
11	Funk Hybrid G-53.....	76.2	75.6	1.00	15.4	85.0	108.7	99.2	101.6
12	Doubet Yellow Dent.....	70.6	69.7	1.14	17.4	70.0	89.5	91.5	91.0
13	Station Yellow Dent.....	70.4	69.4	1.73	17.7	70.3	89.9	91.1	90.8
●	Average of 5 open-pollinated varieties.....	69.0	68.2	1.10	18.0	69.1	88.4	89.5	89.2
14	Mountjoy Utility Dent.....	68.5	67.9	.94	18.1	68.3	87.3	89.1	88.6
15	Sommer Yellow Dent.....	67.4	66.7	1.10	19.3	65.3	83.5	87.5	86.5
Average of all entries.....		77.2	76.2	1.25	16.5	78.2	....	....	....

(C) Average yield of entries grown in 1937, 1938, 1939, 1940

1	Funk Hybrid G-212.....	88.1	87.4	.75	16.6	80.1	111.6	108.4	109.2
2	Illinois Hybrid 960.....	86.3	85.5	1.00	16.4	77.2	107.5	106.1	106.4
3	Pioneer Hi-Bred 307.....	86.5	84.4	2.48	16.2	77.1	107.4	104.7	105.4
4	Funk Hybrid G-53.....	84.2	83.6	.92	15.6	74.8	104.2	103.7	103.8
5	Station Yellow Dent.....	75.6	74.8	1.40	18.4	65.6	91.4	92.8	92.4
5	Doubet Yellow Dent.....	75.5	74.7	.96	17.8	65.8	91.6	92.7	92.4
●	Average of 5 open-pollinated varieties.....	75.0	74.4	.94	18.5	63.8	88.9	92.3	91.4
7	Mountjoy Utility Dent.....	74.6	74.0	.79	18.3	61.8	86.1	91.8	90.4
Average of all entries.....		81.5	80.6	1.19	17.0	71.8	....	....	....

(Table 15 is concluded on page 205.)

Table 16.—CENTRAL ILLINOIS: Mt. Pulaski

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
1940									
		bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	Pioneer Hi-Bred 332	73.5	73.0	.67	16.1	96	103.3	118.3	114.6
2	*Illinois Hybrid 247 (Lauer)	75.3	73.0	3.01	13.5	89	95.8	118.3	112.7
3	*Bear Hybrid OK-32	70.2	70.0	.22	14.3	94	101.2	113.4	110.4
4	Null Hybrid N-89	71.0	68.9	3.01	13.6	94	101.2	111.7	109.1
4	Hulting Hybrid 380	68.1	67.8	.46	14.6	99	106.6	109.9	109.1
6	Illinois Hybrid 201 (Tiemann)	68.3	67.7	.84	13.0	99	106.6	109.7	108.9
7	Pioneer Hi-Bred 313	68.5	67.1	2.06	14.0	99	106.6	108.7	108.2
8	*Illinois Hybrid 21 (Dyar)	68.5	66.7	2.65	13.7	100	107.6	108.1	108.0
9	Illinois Hybrid 206 (Forsythe)	67.8	67.4	.56	13.8	96	103.3	109.2	107.7
10	U. S. Hybrid 13 (Frey)	68.1	66.8	1.84	14.0	96	103.3	108.3	107.1
11	U. S. Hybrid 5 (Oakes)	67.2	67.0	.36	12.0	95	102.3	108.6	107.0
11	M-L Hybrid 514 (Moews-Lowe)	66.8	66.5	.50	13.0	97	104.4	107.8	107.0
13	*Bear Hybrid OK-55	67.1	66.3	1.22	13.6	97	104.4	107.5	106.7
14	M-L Hybrid 500 (Moews-Lowe)	66.7	66.0	1.08	14.3	97	104.4	107.0	106.4
15	Stiegelmeier Hybrid 901	65.0	64.9	.22	12.7	100	107.6	105.2	105.8
16	U. S. Hybrid 13 (Van Horn)	65.3	65.0	.42	13.3	99	106.6	105.3	105.6
17	Crow Hybrid 607	66.7	66.0	.98	15.0	93	100.1	107.0	105.3
18	DeKalb Hybrid 816	67.2	66.2	1.43	15.0	92	99.0	107.3	105.2
19	Illinois Hybrid 201 (Lehmann)	66.0	64.9	1.60	11.7	97	104.4	105.2	105.0
20	U. S. Hybrid 13 (Lehmann)	65.1	64.5	.93	13.8	96	103.3	104.5	104.2
21	*Pioneer Hi-Bred 300	63.7	63.2	.71	13.8	99	106.6	102.4	103.4
22	E. W. Doubet Hybrid D42	65.8	63.3	3.80	13.6	98	105.5	102.6	103.3
23	*Null Hybrid N-77	66.5	64.9	2.38	13.3	90	96.9	105.2	103.1
23	Null-Vollmer Hybrid NV-32 (Vollmer)	64.5	63.8	1.06	13.2	95	102.3	103.4	103.1
25	Crow Hybrid 608	63.7	63.1	.93	13.3	96	103.3	102.3	102.6
26	Stiegelmeier Hybrid 904	63.8	62.7	1.80	13.7	97	104.4	101.6	102.3
27	U. S. Hybrid 13 (Mountjoy)	64.3	62.8	2.26	13.3	96	103.3	101.8	102.2
28	Pioneer Hi-Bred 307	62.9	62.5	.56	12.3	97	104.4	101.3	102.1
28	*Pioneer Hi-Bred 336	62.7	62.3	.66	12.9	98	105.5	101.0	102.1
30	Illinois Hybrid 877 (Peifer)	66.6	66.0	.91	14.7	80	86.1	107.0	101.8
30	Illinois Hybrid 863 (Peifer)	66.8	64.9	2.83	14.5	85	91.5	105.2	101.8
30	Van Horn Hybrid 22	62.6	62.3	.55	13.3	97	104.4	101.0	101.8
33	Stiegelmeier Hybrid 38	62.9	61.8	1.80	14.2	98	105.5	100.2	101.5
34	M-L Hybrid 523 (Moews-Lowe)	63.5	61.7	2.86	13.3	98	105.5	100.0	101.4
35	U. S. Hybrid 35 (Allen)	62.0	61.6	.67	13.1	98	105.5	99.8	101.2
36	U. S. Hybrid 13 (Holmes)	62.9	62.1	1.32	14.0	95	102.3	100.6	101.0
37	Illinois Hybrid 206 (C. Doubet & Son)	63.3	62.0	2.08	14.0	94	101.2	100.5	100.7
38	Bear Hybrid OK-72	62.5	61.1	2.24	13.4	98	105.5	99.0	100.6
39	Kelly Hybrid K-99	61.1	60.9	.37	12.9	98	105.5	98.7	100.4
40	DeKalb Hybrid 817	61.9	61.7	.28	12.7	94	101.2	100.0	100.3
41	U. S. Hybrid 13 (Tiemann)	62.3	61.0	2.06	15.5	94	101.2	98.9	99.5
42	DeKalb Experimental Hybrid 92	64.7	64.0	1.14	16.2	80	86.1	103.7	99.3
43	Illinois Hybrid 201 (Allen)	60.4	60.0	.74	12.5	98	105.5	97.2	99.2
44	Funk Hybrid G-169	60.5	59.6	1.46	12.9	99	106.6	96.6	99.1
45	Pioneer Hi-Bred 333	59.6	59.3	.58	12.7	100	107.6	96.1	99.0
46	*Stiegelmeier Hybrid 100	62.7	61.1	2.49	13.4	91	98.0	99.0	98.8
47	*Illinois Hybrid 437 (I.H.P.)	60.8	60.0	1.39	15.7	96	103.3	97.2	98.7
48	Iowaleth Hybrid 29A	61.7	60.9	1.29	14.5	91	98.0	98.7	98.5
49	*Bear Hybrid OK-77	60.7	60.6	.18	15.2	92	99.0	98.2	98.4
49	Kelly Hybrid K-100	62.2	60.1	3.30	13.8	94	101.2	97.4	98.4
51	Iowaleth Hybrid 29B	60.4	59.5	1.45	14.5	94	101.2	96.4	97.6
52	Mountjoy Hybrid 2121	63.8	59.7	6.41	14.3	92	99.0	96.8	97.4
53	DeKalb Hybrid 840	63.8	61.8	3.10	14.2	81	87.2	100.2	97.0
54	*Holmes Utility Hybrid 69	64.8	61.7	4.71	12.7	97	104.4	93.8	96.4
55	Illinois Hybrid 784 (Canterbury)	62.4	61.9	.76	16.7	78	84.0	100.3	96.2
56	M-L Hybrid 830 (Moews-Lowe)	60.1	58.9	2.04	14.2	91	98.0	95.5	96.1
57	Kelly Hybrid K-374	59.6	57.2	3.97	13.9	98	105.5	92.7	95.9
58	Bear Hybrid OK-79	60.6	57.4	5.31	13.9	94	101.2	93.0	95.1
59	Illinois Hybrid 200 (Canterbury)	57.5	57.2	.48	14.6	94	101.2	92.7	94.8
60	Illinois Hybrid 805 (Holmes)	59.8	57.7	3.49	13.5	89	95.8	93.5	94.1
60	Sibley Farms Hybrid 753B	57.2	57.0	.34	13.4	92	99.0	92.4	94.1
62	Funk Hybrid G-80	56.9	56.6	.45	15.5	93	100.1	91.7	93.8
63	Crow Hybrid 804	60.2	58.7	2.53	14.7	83	89.3	95.1	93.6
63	*E. W. Doubet Hybrid D50	59.6	58.7	1.52	14.3	83	89.3	95.1	93.6
65	Funk Hybrid G-94	58.5	56.3	3.82	13.9	93	100.1	91.2	93.4
66	DeKalb Hybrid 888	56.5	55.9	1.10	14.7	94	101.2	90.6	93.2
67	Funk Hybrid G-84	56.2	55.2	1.76	14.7	92	99.0	89.5	91.9
68	Funk Hybrid G-81	57.6	56.1	2.53	14.0	88	94.7	90.9	91.8
69	Doubet Yellow Dent	57.7	56.3	2.45	14.5	85	91.5	91.2	91.3
70	Station Yellow Dent	57.4	57.1	.57	14.9	78	84.0	92.5	90.4
71	Weasbecker Yellow Dent	56.6	55.6	1.77	15.9	82	88.3	90.1	89.6
●	Average of 5 open-pollinated varieties	54.9	53.8	2.01	15.3	83.2	89.6	87.1	87.7
72	DeKalb Hybrid 899	55.2	54.3	1.56	16.6	80	86.1	88.0	87.5
73	Mountjoy Utility Dent	51.4	51.2	.44	15.2	84	90.4	83.0	84.8
74	*Funk Hybrid G-99	50.4	50.1	.53	15.4	86	92.6	81.2	84.1
75	Canterbury Yellow Dent	51.2	48.7	4.83	16.2	87	93.6	78.9	82.6
Average of all entries		62.8	61.7	1.69	14.0	93.1	.....	.....	.....

*Less than 5 bushels of seed sampled.

A difference of less than 6.1 bushels between total yields of any two entries in this table is not significant.

Table 17.—EAST-CENTRAL ILLINOIS: Paxton

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
	1940	<i>bu.</i>	<i>bu.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	
1	Pioneer Hi-Bred 313	77.3	74.8	3.18	23.0	93	98.4	138.6	128.6
2	Pioneer Hi-Bred 307	74.2	72.7	2.00	18.9	97	102.6	134.7	126.7
3	Stiegelmeier Hybrid 44	70.7	70.5	.29	22.8	95	100.5	130.6	123.1
4	M-L Hybrid 500 (Moews-Lowe)	68.2	67.5	.98	21.5	99	104.8	125.1	120.0
5	Hoosier Crost Hybrid 668-L	68.5	68.1	.61	22.8	95	100.5	126.2	119.8
6	Iowa Hybrid AQ	67.9	66.8	1.64	19.0	96	101.6	123.8	118.2
7	Pioneer Hi-Bred 333	68.7	66.4	3.30	20.9	97	102.6	123.0	117.9
8	M-L Hybrid 514 (Moews-Lowe)	66.5	65.8	1.08	16.9	98	103.7	121.9	117.4
9	Illinois Hybrid 960 (L. A. Sass)	65.6	65.2	.59	20.6	95	100.5	120.8	115.6
10	*Pioneer Hi-Bred 300	65.7	64.4	1.95	22.1	97	102.6	119.3	115.1
11	U. S. Hybrid 14 (Ferris)	64.6	64.3	.45	20.6	95	100.5	119.1	114.5
12	M-L Hybrid 523 (Moews-Lowe)	64.7	63.7	1.48	20.3	98	103.7	118.0	114.4
13	U. S. Hybrid 13 (Frey)	64.5	63.6	1.42	20.6	98	103.7	117.8	114.3
14	Crow Hybrid 608	64.2	63.4	1.22	19.9	98	103.7	117.5	114.1
15	*Pioneer Hi-Bred 336	65.1	63.4	2.54	21.2	97	102.6	117.5	113.8
16	Stiegelmeier Hybrid 901	63.5	62.5	1.51	19.3	99	104.8	115.8	113.1
17	*Illinois Hybrid 246 (I.H.P.)	66.0	63.4	4.01	21.5	93	98.4	117.5	112.7
18	DeKalb Hybrid 821B	62.0	61.3	1.12	20.9	99	104.8	113.6	111.4
19	Illinois Hybrid 201 (Holmes)	63.8	61.4	3.78	19.5	98	103.7	113.8	111.3
20	Null Hybrid N-16	64.4	61.3	4.87	20.3	98	103.7	113.6	111.1
21	Bear Hybrid OK-72	63.6	61.1	3.97	20.3	99	104.8	113.2	111.1
22	Funk Hybrid G-169	63.2	61.2	3.12	19.2	96	101.6	113.4	110.5
23	Seeber Hybrid 11B	61.3	60.6	1.10	22.6	97	102.6	112.3	109.9
24	Illinois Hybrid 126 (Oakes)	61.2	59.6	2.59	22.4	100	105.8	110.4	109.2
25	Pioneer Hi-Bred 332	60.2	59.8	.62	24.5	97	102.6	110.8	108.8
26	Illinois Hybrid 247 (Canterbury)	59.9	59.2	1.24	20.6	100	105.8	109.7	108.7
27	Kelly Hybrid K-374	62.1	58.7	5.54	19.8	100	105.8	108.8	108.1
28	Iowa Hybrid 29B	57.8	57.2	1.12	20.2	97	102.6	106.0	105.2
29	Illinois Hybrid 21 (Frey)	58.1	56.5	2.67	20.6	100	105.8	104.7	105.0
30	*Holmes Utility Hybrid 69	59.1	56.6	4.20	19.6	99	104.8	104.9	104.9
31	U. S. Hybrid 44 (Frey)	57.6	57.0	.98	20.3	97	102.6	105.6	104.8
32	Bear Hybrid OK-60	57.0	56.8	.31	19.9	94	99.5	105.2	103.8
33	Crow Hybrid 804	57.3	56.3	1.82	20.3	96	101.6	104.3	103.6
34	*Sibley Farms Hybrid S75	56.7	55.8	1.54	21.2	97	102.6	103.4	103.2
35	Bear Hybrid OK-70	56.4	55.6	1.50	19.7	97	102.6	103.0	102.9
36	Stiegelmeier Hybrid 38	57.2	55.9	2.22	20.3	95	100.5	103.6	102.8
37	National Hybrid 129	56.2	55.8	.80	21.2	95	100.5	103.4	102.7
38	Stiegelmeier Hybrid 904	56.9	55.1	3.09	23.2	98	103.7	102.1	102.5
39	U. S. Hybrid 44 (Tiemann)	57.1	55.6	2.55	20.3	95	100.5	103.0	102.4
39	*Illinois Hybrid 690 (I.H.P.)	57.0	55.4	2.76	20.3	96	101.6	102.7	102.4
41	Sass Hybrid 40 (U. G. Sass)	57.8	56.0	2.98	21.8	92	97.4	103.8	102.2
41	U. S. Hybrid 5 (P.C.I.A.)	56.6	54.9	3.02	20.6	98	103.7	101.7	102.2
43	Illinois Hybrid 206 (Burrus)	55.0	54.0	1.80	20.3	100	105.8	100.1	101.5
44	*Sibley Farms Hybrid S73	55.6	54.6	1.74	22.6	94	99.5	101.2	100.8
45	Funk Hybrid G-212	55.3	53.6	3.08	23.2	97	102.6	99.3	100.1
46	Iowa Hybrid 29A	54.7	53.9	1.38	21.2	94	99.5	99.9	99.8
46	Illinois Hybrid 200 (Dallmier)	55.6	53.4	3.95	22.8	97	102.6	98.9	99.8
48	Funk Hybrid G-32	53.3	52.5	1.59	20.6	100	105.8	97.3	99.4
49	E. W. Doubet Hybrid D11	54.0	52.9	1.98	21.2	97	102.6	98.0	99.2
50	Funk Hybrid G-94	53.3	52.2	2.12	22.1	100	105.8	96.7	99.0
51	Macon Hybrid 666	55.0	52.4	4.66	19.6	97	102.6	97.1	98.5
52	Funk Hybrid G-53	52.7	51.7	1.87	19.9	99	104.8	95.8	98.1
53	DeKalb Experimental Hybrid 80	54.9	52.9	3.73	23.2	92	97.4	98.0	97.8
53	*DeKalb Experimental Hybrid 87	53.9	52.3	2.92	22.6	95	100.5	96.9	97.8
55	Kelly Hybrid K-99	55.4	51.4	7.17	20.6	97	102.6	95.2	97.1
56	DeKalb Hybrid 816	51.5	50.8	1.27	24.8	100	105.8	94.1	97.0
57	*Richbred Hybrid 381	52.7	49.5	6.05	23.0	98	103.7	91.7	94.7
58	DeKalb Experimental Hybrid 94	50.0	48.4	3.14	20.9	99	104.8	89.7	93.5
59	Sibley Farms Hybrid 753B	48.0	47.4	1.18	20.3	99	104.8	87.8	92.1
60	DeKalb Hybrid 888	50.1	47.7	4.73	22.6	96	101.6	88.4	91.7
61	Crow Hybrid 607	51.3	49.6	3.32	22.4	83	87.8	91.9	90.9
62	M-L Hybrid 830 (Moews-Lowe)	48.7	46.8	3.82	21.2	97	102.6	86.7	90.7
62	Sibley Farms Hybrid 753A	47.2	46.8	.95	22.4	97	102.6	86.7	90.7
64	*Bear Hybrid OK-67	47.4	46.2	2.58	20.3	99	104.8	85.6	90.4
65	Illinois Hybrid 877 (Kerns)	47.3	46.9	.80	23.8	89	94.2	86.9	88.7
66	*Funk Hybrid G-81	44.0	42.8	2.68	21.2	96	101.6	79.3	84.9
67	Illinois Hybrid 784 (Kerns)	40.3	38.4	4.74	24.0	91	96.3	71.2	77.5
68	Crow Hybrid 501 (W)	40.1	38.4	4.22	20.9	84	88.9	71.2	75.6
69	Doubet Yellow Dent	34.5	34.0	1.41	23.4	79	83.6	63.0	68.2
70	Station Yellow Dent	32.3	32.0	.94	23.8	72	76.2	59.3	63.5
70	● Average of 5 open-pollinated varieties	30.3	29.9	1.12	23.7	70.8	74.8	55.6	60.4
71	*Canterbury Yellow Dent	30.5	30.0	1.77	24.3	68	72.0	55.6	59.7
72	*Miller Hybrid 1182 (W)	27.2	25.9	4.90	27.0	85	89.9	48.0	58.5
73	Sommer Yellow Dent	28.8	28.6	.64	24.3	69	73.0	53.0	58.0
74	Mountjoy Utility Dent	25.5	25.3	.82	22.6	66	69.8	46.9	52.6
75	*Miller Hybrid 1180 (W)	14.4	13.3	7.98	32.3	91	96.3	24.6	42.5
	Average of all entries	55.3	54.0	2.45	21.6	94.5	....	....	....

*Less than 5 bushels of seed sampled. ¹Average of 9 plots instead of 10.

A difference of less than 6.4 bushels between total yields of any two entries in this table is not significant.

Table 18.—EAST-CENTRAL ILLINOIS: Paxton Summaries

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
(A) Average yield of entries grown in 1939 and 1940									
		bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	Pioneer Hi-Bred 313.....	78.5	76.3	2.77	18.1	96.5	102.9	120.7	116.2
2	Pioneer Hi-Bred 307.....	75.6	74.1	2.04	15.8	97.5	103.9	117.2	113.9
3	Hoosier Crost Hybrid 668-L.....	73.6	71.4	2.18	18.2	96.5	102.9	113.0	110.5
4	Stiegelmeier Hybrid 44.....	71.3	71.0	.43	17.8	94.5	100.7	112.3	109.4
5	Iowaleth Hybrid AQ.....	71.0	69.4	2.17	16.2	98.0	104.5	109.8	108.5
6	Illinois Hybrid 960.....	70.8	69.8	1.34	17.0	95.0	101.3	110.4	108.1
7	Illinois Hybrid 201 (Holmes).....	71.3	69.1	3.15	16.6	96.5	102.9	109.3	107.6
8	U. S. Hybrid 14 (Ferris).....	69.8	68.7	1.46	16.9	96.5	102.9	108.7	107.2
9	M-L Hybrid 514 (Moews-Lowe).....	71.2	68.1	4.30	15.2	99.0	105.5	107.8	107.2
10	Null Hybrid N-16.....	70.8	68.6	3.26	17.0	96.0	102.3	108.5	107.0
11	U. S. Hybrid 13.....	69.4	67.2	3.10	17.2	99.0	105.5	106.3	106.1
12	Bear Hybrid OK-60.....	68.0	67.8	.28	16.5	93.5	99.7	107.3	105.4
13	Crow Hybrid 608.....	67.4	66.4	1.36	16.6	98.5	105.0	105.1	105.1
14	Kelly Hybrid K-374.....	69.6	66.1	5.21	16.6	98.0	104.5	104.6	104.6
15	U. S. Hybrid 44.....	67.9	66.1	2.30	16.8	97.8	104.3	104.6	104.5
16	Stiegelmeier Hybrid 901.....	67.6	65.8	2.61	16.4	98.0	104.5	104.1	104.2
17	Stiegelmeier Hybrid 904.....	67.6	65.1	3.56	18.4	98.5	105.0	103.0	103.5
18	Illinois Hybrid 126 (Oakes).....	66.1	64.7	2.17	18.6	98.5	105.0	102.4	103.1
19	Illinois Hybrid 206 (Burrus).....	64.8	64.1	1.24	16.8	98.5	105.0	101.4	102.3
20	Sibley Farms Hybrid 753B.....	64.1	63.3	1.15	17.4	97.0	103.4	100.2	101.0
21	Funk Hybrid G-212.....	64.0	62.6	2.20	18.2	98.5	105.0	99.1	100.6
22	Stiegelmeier Hybrid 38.....	64.8	62.7	3.14	16.8	97.5	103.9	99.2	100.4
22	Funk Hybrid G-94.....	63.6	62.6	1.72	17.8	98.0	104.5	99.1	100.4
24	E. W. Doubet Hybrid D11.....	64.8	62.2	3.57	17.5	96.5	102.9	98.4	99.5
25	Illinois Hybrid 200.....	64.4	62.0	3.88	18.6	96.0	102.3	98.1	99.2
26	DeKalb Hybrid 888.....	63.7	62.2	2.72	18.2	94.5	100.7	98.4	99.0
27	Crow Hybrid 804.....	64.1	61.8	3.32	17.1	95.0	101.3	97.8	98.7
28	Crow Hybrid 607.....	65.1	63.2	3.08	17.8	88.5	94.3	100.0	98.6
29	Sibley Farms Hybrid 753A.....	62.3	60.1	3.06	18.2	95.5	101.8	95.1	96.8
29	Funk Hybrid G-53.....	61.4	59.7	2.54	16.6	97.5	103.9	94.5	96.8
31	Doubet Yellow Dent.....	49.8	48.6	2.14	18.6	80.5	85.8	76.9	79.1
32	Station Yellow Dent.....	48.8	46.5	3.81	18.8	75.5	80.5	73.6	75.3
●	Average of 5 open-pollinated varieties.....	47.4	46.1	2.78	1.86	76.3	81.3	72.9	75.0
33	Canterbury Yellow Dent.....	47.1	45.6	2.91	19.1	77.0	82.1	72.2	74.7
34	Mountjoy Utility Dent.....	46.2	45.6	1.26	18.0	76.0	81.0	72.2	74.4
35	Sommer Yellow Dent.....	45.1	44.4	1.25	18.8	72.5	77.3	70.3	72.1
Average of all entries.....		64.9	63.2	2.48	17.4	93.8	....	....	....
(B) Average yield of entries grown in 1938, 1939, 1940									
		72.7	70.9	2.40	16.7	88.8	101.1	122.7	117.3
1	Pioneer Hi-Bred 313.....	72.7	70.9	2.40	16.7	88.8	101.1	122.7	117.3
2	Pioneer Hi-Bred 307.....	70.1	67.8	3.47	16.1	92.2	105.0	117.3	114.2
3	Illinois Hybrid 960.....	66.5	65.4	1.56	15.7	90.7	103.3	113.1	110.6
4	Bear Hybrid OK-60.....	65.3	64.8	.69	15.4	91.0	103.6	112.1	110.0
5	U. S. Hybrid 44.....	65.4	63.1	3.39	15.8	95.0	108.2	109.2	109.0
5	U. S. Hybrid 13.....	64.7	63.0	2.46	16.5	95.8	109.1	109.0	109.0
7	Iowaleth Hybrid AQ.....	64.3	62.8	2.36	15.0	94.5	107.6	108.7	108.4
8	Funk Hybrid G-94.....	60.9	61.5	1.88	17.1	95.3	108.5	106.4	106.9
9	Crow Hybrid 608.....	60.4	59.6	1.36	15.7	93.2	106.2	103.1	103.9
10	Crow Hybrid 804.....	60.8	59.1	2.50	16.1	86.7	98.8	102.2	101.4
11	Funk Hybrid G-212.....	59.3	58.0	2.20	16.3	90.7	103.3	100.3	101.1
12	Funk Hybrid G-53.....	57.5	56.1	2.35	15.4	93.7	106.7	97.1	99.5
13	Doubet Yellow Dent.....	45.2	44.2	2.06	17.1	80.8	92.0	76.5	80.4
14	Station Yellow Dent.....	45.7	44.0	2.97	17.8	74.8	85.2	76.1	78.4
●	Average of 5 open-pollinated varieties.....	44.4	43.3	2.51	17.4	74.0	84.3	74.9	77.2
15	Sommer Yellow Dent.....	43.6	43.2	.90	17.5	70.5	80.3	74.7	76.1
16	Mountjoy Utility Dent.....	42.3	41.1	2.94	16.8	70.7	80.5	71.1	73.4
Average of all entries.....		59.0	57.8	2.22	16.3	87.8	....	....	....
(C) Average yield of entries grown in 1937, 1938, 1939, 1940									
		71.0	69.4	2.32	14.9	93.2	109.0	117.0	115.0
1	Pioneer Hi-Bred 307.....	71.0	69.4	2.32	14.9	93.2	109.0	117.0	115.0
2	Illinois Hybrid 960.....	69.6	68.8	1.26	15.8	90.2	105.5	116.0	113.4
3	U. S. Hybrid 44.....	67.8	66.0	2.62	16.0	94.0	109.9	111.3	111.0
4	Funk Hybrid G-212.....	63.5	62.5	1.76	16.2	90.8	106.2	105.4	105.6
5	Funk Hybrid G-53.....	61.9	60.8	1.79	15.6	92.0	107.6	102.5	103.8
6	Doubet Yellow Dent.....	49.8	49.0	1.55	17.3	78.6	91.9	82.6	84.9
7	Station Yellow Dent.....	51.0	49.7	2.23	18.0	74.5	87.1	83.8	84.8
●	Average of 5 open-pollinated varieties.....	50.0	49.2	1.89	17.6	74.1	86.7	83.0	83.9
8	Mountjoy Utility Dent.....	48.9	48.0	2.24	16.7	70.5	82.5	80.9	81.3
Average of all entries.....		60.4	59.3	1.97	16.3	85.5	....	....	....

(Table 18 is concluded on page 205.)

Summaries of Four Fields, Concluded

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
Cambridge (9C) Average yield of entries grown in 1937, 1938, 1939, 1940									
		<i>bu.</i>	<i>bu.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>	
1	Pioneer Hi-Bred 307.....	111.2	108.7	2.43	17.3	77.6	108.5	110.4	109.9
2	Funk Hybrid G-212.....	107.4	106.7	.72	18.1	76.4	106.9	108.3	108.0
3	U. S. Hybrid 44.....	108.2	107.1	1.10	16.9	74.4	104.1	108.7	107.6
4	Illinois Hybrid 960.....	107.9	106.8	1.02	17.7	70.9	99.2	108.4	106.1
5	Morgan Hybrid M-52.....	104.5	102.5	2.08	17.1	75.1	105.0	104.1	104.3
6	Funk Hybrid G-32.....	103.5	102.2	1.34	18.5	75.4	105.5	103.8	104.2
7	DeKalb Hybrid 825.....	97.4	96.2	1.56	18.4	86.4	120.8	97.7	103.5
8	Illinois Hybrid 751.....	97.1	95.6	1.48	17.1	78.2	109.4	97.1	100.2
9	Doubet Yellow Dent.....	87.9	86.0	1.95	19.2	60.2	84.2	87.3	86.5
10	Krug.....	88.0	85.9	2.39	18.4	57.0	79.7	87.2	85.3
	● Average of 5 open-pollinated varieties...	86.0	84.8	1.42	18.5	58.1	81.2	86.1	84.9
11	Roeschley Yellow Dent.....	86.9	85.8	1.20	17.3	55.0	76.9	87.1	84.6
	Average of all entries.....	100.0	98.5	1.57	17.8	71.5	....	....	....
Cambridge (9D) Average yield of entries grown in 1936, 1937, 1938, 1939, 1940									
1	U. S. Hybrid 44.....	92.8	91.5	1.36	17.3	78.4	104.8	107.1	106.5
2	Funk Hybrid G-212.....	91.3	90.4	1.01	17.9	79.5	106.3	105.9	106.0
3	Illinois Hybrid 960.....	92.6	91.6	1.12	17.5	74.2	99.2	107.3	105.3
4	Illinois Hybrid 751.....	82.6	81.3	1.45	17.1	80.4	107.5	95.2	98.3
5	Roeschley Yellow Dent.....	73.1	72.1	1.39	17.6	61.3	82.0	84.4	83.8
	● Average of 5 open-pollinated varieties...	72.3	71.1	1.79	18.4	62.3	83.3	85.3	83.3
	Average of all entries.....	86.5	85.4	1.27	17.5	74.8	....	....	....
Reddick (13D) Average yield of entries grown in 1936, 1937, 1938, 1939, 1940									
1	Funk Hybrid G-212.....	77.2	76.0	1.76	16.6	84.2	107.3	107.3	107.3
2	U. S. Hybrid 44.....	74.0	73.5	.76	17.2	83.0	105.7	103.8	104.3
3	Roeschley Yellow Dent.....	63.5	62.8	1.28	18.5	68.4	87.1	88.7	88.3
	● Average of 5 open-pollinated varieties...	61.4	60.6	1.53	18.5	68.0	86.6	85.6	85.8
	Average of all entries.....	71.6	70.8	1.27	17.4	78.5	....	....	....
Littleton (15D) Average yield of entries grown in 1936, 1937, 1938, 1939, 1940									
1	Funk Hybrid G-212.....	77.6	76.9	.98	16.6	81.0	112.5	108.9	109.8
2	Illinois Hybrid 960.....	77.7	76.7	1.10	16.5	77.3	107.4	108.6	108.3
3	Station Yellow Dent.....	65.8	64.9	1.72	18.5	66.0	91.7	91.9	91.8
	● Average of 5 open-pollinated varieties...	64.8	64.1	1.24	18.5	65.5	91.0	90.8	90.9
4	Mountjoy Utility Dent.....	64.2	63.7	1.11	18.2	63.6	88.3	90.2	89.7
	Average of all entries.....	71.3	70.6	1.23	17.4	72.0	....	....	....
Paxton (18D) Average yield of entries grown in 1936, 1937, 1938, 1939, 1940									
1	Illinois Hybrid 960.....	70.2	69.3	1.30	16.5	85.9	111.9	120.5	118.4
2	Funk Hybrid G-212.....	64.5	63.4	1.83	16.7	86.5	112.6	110.3	110.9
3	Station Yellow Dent.....	51.0	49.7	2.46	18.6	69.8	90.9	86.4	87.5
	● Average of 5 open-pollinated varieties...	50.0	49.1	2.09	18.1	68.5	89.2	85.4	86.4
4	Mountjoy Utility Dent.....	48.5	47.6	2.30	17.4	65.0	84.6	82.8	83.2
	Average of all entries.....	58.6	57.5	1.97	17.3	76.8	....	....	....

Table 19.—EAST SOUTH-CENTRAL ILLINOIS: Sullivan

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
	1940	bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	*Pioneer Hi-Bred 300.....	85.4	84.6	.95	17.1	99	100.0	120.7	115.5
2	Pioneer Hi-Bred 313.....	82.9	80.1	3.36	19.7	100	101.0	114.3	111.0
3	Illinois Hybrid 126 (Oakes).....	79.6	79.3	.38	16.4	100	101.0	113.2	110.2
4	Null Hybrid N-61.....	79.8	79.5	.32	16.0	99	100.0	113.4	110.1
5	*Null-Vollmer Hybrid NV-10 (Vollmer).....	79.6	79.2	.54	17.1	100	101.0	113.0	110.0
6	Illinois Hybrid 247 (Canterbury).....	82.2	78.8	4.13	17.4	100	101.0	112.4	109.6
7	U. S. Hybrid 13 (Tiemann).....	78.9	78.5	.49	17.1	100	101.0	112.0	109.2
8	Pioneer Hi-Bred 333.....	79.5	78.2	1.62	16.4	100	101.0	111.6	109.0
9	Illinois Hybrid 201 (Wilson).....	78.3	78.0	.38	16.0	100	101.0	111.3	108.7
10	M-L Hybrid 523 (Moews-Lowe).....	78.1	77.6	.58	16.7	100	101.0	110.7	108.3
11	Illinois Hybrid 863 (Canterbury).....	78.0	77.5	.69	19.2	99	100.0	110.6	108.0
12	Pioneer Hi-Bred 332.....	77.1	76.8	.44	20.2	100	101.0	109.6	107.4
13	Illinois Hybrid 947 (Koch).....	78.1	76.8	1.68	18.5	98	99.0	109.6	107.0
14	*Bear Hybrid OK-99.....	76.8	76.2	.75	20.0	100	101.0	108.7	106.8
15	Illinois Hybrid 885A (Henley).....	76.1	76.0	.16	18.3	100	101.0	108.4	106.6
16	Bear Hybrid OK-30.....	76.5	76.0	.63	16.7	100	101.0	108.4	106.5
17	*Macon Hybrid 666.....	77.1	75.8	1.74	16.4	100	101.0	108.2	106.4
18	Illinois Hybrid 804 (Pfeifer).....	76.2	75.6	.84	18.0	100	101.0	107.9	106.2
19	Hill Hybrid 200 (Macon Co. Seed Co.).....	75.2	74.7	.70	17.5	100	101.0	106.6	105.2
20	M-L Hybrid 500 (Moews-Lowe).....	76.1	74.1	2.59	18.0	99	100.0	105.7	104.3
21	Iowearth Hybrid 28N.....	75.3	73.7	2.12	20.0	100	101.0	105.2	104.2
22	*Bear Hybrid OK-80.....	74.2	73.6	.78	17.4	99	100.0	105.0	103.8
23	*Henley & Whisnand Hyb. 834 (Whisnand).....	74.6	73.5	1.41	18.3	99	100.0	104.9	103.7
24	Illinois Hybrid 566 (Pocklington).....	73.8	73.5	.38	20.0	99	100.0	104.9	103.7
25	DeKalb Hybrid 888.....	74.3	73.2	1.49	18.5	100	101.0	104.4	103.6
26	*Funk Hybrid G-46.....	73.1	72.9	.26	18.3	100	101.0	104.0	103.2
27	Iowearth Hybrid 29A.....	73.4	72.5	1.21	17.8	100	101.0	103.5	102.9
28	Henley & Whisnand Hybrid 883 (Henley).....	73.0	71.9	1.47	17.5	99	100.0	102.6	102.0
29	Illinois Hybrid 784 (Powers).....	72.6	71.7	1.25	20.3	100	101.0	102.3	102.0
30	Illinois Hybrid 877 (Kerns).....	71.3	70.8	.70	18.5	100	101.0	101.0	101.0
31	*Bear Hybrid OK-97.....	72.5	72.1	.62	20.6	92	92.9	102.9	100.4
32	*DeKalb Hybrid 816.....	74.1	70.2	5.21	17.2	100	101.0	100.2	100.4
33	Funk Hybrid G-94.....	72.2	70.1	3.03	17.0	100	101.0	100.0	100.2
34	*Van Horn Hybrid 55.....	71.5	70.3	1.73	20.6	98	99.0	100.3	100.0
35	*DeKalb Hybrid 899.....	70.8	69.8	1.44	20.8	99	100.0	99.6	99.7
36	Sibley Farms Hybrid 753A.....	70.1	69.6	.73	18.5	100	101.0	99.3	99.7
37	Pioneer Hi-Bred 332A.....	70.6	69.3	1.79	19.5	100	101.0	98.9	99.4
38	*Illinois Hybrid 801 (I.H.P.).....	70.5	70.4	.11	20.3	94	94.9	100.5	99.1
39	M-L Hybrid 830 (Moews-Lowe).....	69.2	68.6	.80	17.4	100	101.0	97.9	98.7
40	DeKalb Hybrid 825.....	69.2	68.5	1.05	17.8	100	101.0	97.7	98.5
41	*Crow Hybrid 804.....	68.5	68.2	.48	18.0	100	101.0	97.3	98.2
42	Funk Hybrid G-83.....	69.4	68.3	1.52	20.3	99	100.0	97.5	98.1
43	Seebor Hybrid 36.....	68.3	67.5	1.10	18.1	100	101.0	96.3	97.5
44	*Crow Hybrid 806.....	67.1	66.8	.45	20.7	98	99.0	95.3	96.2
45	Illinois Hybrid 448 (Pfeifer).....	67.1	66.7	.60	20.7	98	99.0	95.2	96.2
46	*Funk Hybrid G-88.....	65.7	65.5	.24	21.8	100	101.0	93.5	95.4
47	*Henley & Whisnand Hyb. 851 (Whisnand).....	66.6	64.9	2.52	19.4	100	101.0	92.6	94.7
48	Crow Hybrid 701 (W).....	63.4	63.2	.28	18.3	100	101.0	90.2	92.9
49	*Funk Hybrid G-580 (W).....	63.4	63.1	.42	20.0	100	101.0	90.0	92.8
50	Crow Hybrid 607.....	62.4	61.4	1.57	17.8	100	101.0	87.6	91.0
51	Funk Hybrid G-80.....	61.7	61.4	.50	19.2	100	101.0	87.6	91.0
52	Holmes Utility Hybrid 79.....	63.3	61.2	3.28	20.5	99	100.0	87.3	90.5
53	*Illinois Hybrid 800 (I.H.P.).....	58.1	57.9	.36	23.0	100	101.0	82.6	87.2
54	*Wilson Yellow Dent.....	59.4	59.1	.55	20.1	94	94.9	84.3	87.0
55	DeKalb Hybrid 919 (W).....	58.4	58.3	.24	20.4	96	97.0	81.2	86.6
56	DeKalb Hybrid 922 (W).....	57.1	57.0	.26	20.1	99	100.0	83.3	86.0
57	Rice White Dent.....	57.4	57.3	.20	18.5	95	96.0	81.8	85.4
58	Canterbury Yellow Dent.....	56.3	56.3	0.00	20.1	99	100.0	80.3	85.2
59	● Average of 5 open-pollinated varieties.....	55.0	54.8	.31	19.4	97	98.2	78.3	83.3
59	Shuman Golden Beauty.....	52.1	51.9	.37	18.5	99	100.0	74.1	80.6
60	Bunning White Dent.....	49.8	49.6	.44	20.0	99	100.0	70.8	78.1
	Average of all entries.....	70.9	70.1	1.10	18.7	99.1	....	....	....

*Less than 5 bushels of seed sampled. ¹Average of 9 plots instead of 10.

A difference of less than 4.1 bushels between total yields of any two entries in this table is not significant.

Table 20.—EAST SOUTH-CENTRAL ILLINOIS: Sullivan Summaries

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
(A) Average yield of entries grown in 1939 and 1940									
		bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	Null-Vollmer Hybrid NV-10 (Vollmer) ..	90.4	90.0	.50	15.2	97.5	104.2	109.4	108.1
2	Null Hybrid N-61	90.7	90.4	.33	14.4	95.5	102.0	109.8	107.8
3	U. S. Hybrid 13	88.4	87.2	1.20	15.6	98.0	104.7	106.0	105.7
4	Illinois Hybrid 885A (Henley)	90.2	88.8	1.46	15.6	92.5	98.8	107.9	105.6
4	Illinois Hybrid 126 (Oakes)	87.6	87.2	.51	14.8	97.5	104.2	106.0	105.6
6	Funk Hybrid G-83	89.2	87.6	1.76	18.1	95.0	101.5	106.4	105.2
7	Pioneer Hi-Bred 313	89.6	87.7	2.18	16.6	94.0	100.4	106.6	105.1
8	Illinois Hybrid 877	88.4	87.7	.80	16.2	93.2	99.6	106.6	104.9
8	Illinois Hybrid 200	88.5	87.2	1.39	15.4	95.0	101.5	106.0	104.9
10	Bear Hybrid OK-80	87.7	87.1	.72	15.7	95.5	102.0	105.8	104.8
11	Bear Hybrid OK-30	86.6	86.2	.46	15.1	94.5	101.0	104.7	103.8
11	Illinois Hybrid 784	87.8	86.1	1.76	17.9	94.8	101.3	104.6	103.8
13	DeKalb Hybrid 899	87.6	86.3	1.46	18.2	92.2	98.5	104.9	103.3
14	Illinois Hybrid 863	88.0	86.4	1.68	17.0	91.5	97.8	105.0	103.2
15	Illinois Hybrid 947 (Koeh)	86.4	85.4	1.36	16.0	93.8	100.2	103.8	102.9
16	DeKalb Hybrid 816	87.6	84.2	4.06	15.2	95.8	102.4	102.3	102.3
17	Funk Hybrid G-80	84.4	83.4	.96	17.4	98.2	104.9	101.3	102.2
18	Iowaleth Hybrid 28N	85.2	84.2	1.22	17.0	94.0	100.4	102.3	101.8
19	Funk Hybrid G-46	84.4	82.9	1.56	16.4	96.5	103.1	100.7	101.3
20	Crow Hybrid 806	84.6	83.8	.82	18.2	92.5	98.8	101.8	101.1
21	DeKalb Hybrid 888	84.5	82.6	2.10	16.5	94.8	101.3	100.4	100.6
22	DeKalb Hybrid 825	76.6	76.1	.81	15.2	98.5	105.2	92.5	95.7
23	Crow Hybrid 804	77.2	75.6	1.78	17.2	95.5	102.0	91.9	94.4
24	Wilson Yellow Dent	76.1	75.2	1.03	17.2	87.0	93.0	92.5	92.6
25	Rice White Dent	75.8	74.6	1.30	16.4	87.5	93.5	90.6	91.3
26	Crow Hybrid 701 (W)	74.4	73.4	1.21	17.6	88.5	94.6	89.2	90.6
27	DeKalb Hybrid 922 (W)	72.4	71.7	.89	18.5	93.2	99.6	87.1	90.2
28	Canterbury Yellow Dent	73.6	72.5	1.25	17.4	89.0	95.1	88.0	89.8
●	Average of 5 open-pollinated varieties ..	73.2	72.2	1.11	17.0	88.2	94.2	87.7	89.3
29	Bunning White Dent	72.2	71.1	1.41	17.6	88.8	94.9	86.4	88.5
30	Shuman Golden Beauty	68.0	67.6	.56	16.4	89.0	95.1	82.1	85.4
Average of all entries		83.5	82.3	1.28	16.5	93.6	....	....	....
(B) Average yield of entries grown in 1938, 1939, 1940									
1	Illinois Hybrid 784	86.4	84.2	2.49	18.6	87.5	105.7	111.1	109.8
2	Bear Hybrid OK-30	83.6	83.3	.39	15.4	86.7	104.7	109.9	108.6
3	Pioneer Hi-Bred 313	86.8	85.5	1.51	17.4	77.7	93.8	112.8	108.1
4	Funk Hybrid G-46	80.7	78.7	2.39	17.2	86.7	104.7	103.8	104.0
5	Illinois Hybrid 863	80.6	78.9	2.08	17.4	83.0	100.2	104.1	103.1
5	DeKalb Hybrid 825	76.9	76.5	.54	15.7	90.8	109.7	100.9	103.1
7	Illinois Hybrid 947	79.3	78.5	1.04	16.5	83.8	101.2	103.6	103.0
8	Crow Hybrid 804	74.2	72.8	1.83	17.1	82.0	99.0	96.0	96.8
9	Wilson Yellow Dent	73.7	72.2	1.97	17.7	80.5	97.2	95.3	95.8
10	Canterbury Yellow Dent	72.5	71.6	.68	17.9	81.3	98.2	94.5	95.4
11	Bunning White Dent	72.9	72.0	1.09	17.5	79.3	95.6	95.0	95.2
12	Rice White Dent	72.6	71.8	1.20	16.8	77.8	94.0	94.7	94.5
13	Crow Hybrid 701 (W)	71.5	70.6	1.09	17.6	80.3	97.0	93.1	94.1
●	Average of 5 open-pollinated varieties ..	71.3	70.4	1.13	17.3	80.0	96.6	92.9	93.8
14	Shuman Golden Beauty	64.7	64.4	.46	16.7	81.3	98.2	85.0	88.3
Average of all entries		76.9	75.8	1.34	17.1	82.8	....	....	....
(C) Average yield of entries grown in 1937, 1938, 1939, 1940									
1	Funk Hybrid G-46	88.7	87.2	1.86	17.8	85.8	109.0	105.8	106.6
2	Illinois Hybrid 863	90.0	88.6	1.69	18.1	77.8	98.9	107.5	105.4
3	DeKalb Hybrid 825	83.6	83.2	.51	16.8	91.1	115.8	101.0	104.7
4	Illinois Hybrid 947	84.4	83.7	.92	17.1	81.5	103.6	101.6	102.1
5	Bunning White Dent	82.6	81.9	.84	17.7	72.4	92.0	99.4	97.6
6	Rice White Dent	82.3	81.5	.90	17.6	70.1	89.1	98.9	96.4
●	Average of 5 open-pollinated varieties ..	79.6	78.9	.88	18.0	71.7	91.1	95.8	94.6
7	Shuman Golden Beauty	71.1	70.8	.34	17.9	72.0	91.5	85.9	87.3
Average of all entries		83.2	82.4	1.01	17.6	78.7	....	....	....

Table 21.—WEST SOUTH-CENTRAL ILLINOIS: Greenfield

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
1940		bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	U. S. Hybrid 5 (Oakes).....	102.2	101.7	.51	15.2	99	100.9	123.4	117.8
2	DeKalb Experimental Hybrid 93.....	101.6	100.4	1.23	16.9	100	101.9	121.8	116.8
3	Pioneer Hi-Bred 313.....	99.4	99.2	.20	19.2	97	98.9	120.4	115.0
4	*Pioneer Hi-Bred 300.....	99.6	98.4	1.20	15.9	99	100.9	119.4	114.8
5	U. S. Hybrid 13 (Burrus).....	98.4	97.9	.47	15.9	100	101.9	118.8	114.6
6	U. S. Hybrid 13 (Huey Seed Co.).....	96.5	94.8	1.74	16.2	100	101.9	115.0	111.7
7	M-L Hybrid 500 (Moews-Lowe).....	95.1	94.5	.59	17.8	100	101.9	114.7	111.5
8	Pioneer Hi-Bred 332.....	93.5	92.8	.64	19.4	100	101.9	112.6	109.9
9	Illinois Hybrid 247 (Canterbury).....	92.9	92.1	.90	16.7	100	101.9	111.8	109.3
9	U. S. Hybrid 13 (Tiemann).....	92.5	92.1	.38	16.9	100	101.9	111.8	109.3
11	*Iowaalt Hybrid TX 2.....	92.2	92.0	.18	20.0	99	100.9	111.7	109.0
12	DeKalb Experimental Hybrid 92.....	91.6	90.7	.98	18.0	100	101.9	110.1	108.1
13	M-L Hybrid 523 (Moews-Lowe).....	90.7	90.0	.74	16.7	100	101.9	109.2	107.4
14	*Null-Vollmer Hybrid NV-47 (Vollmer).....	90.8	89.7	1.23	16.6	100	101.9	108.9	107.2
15	Illinois Hybrid 805 (Holmes).....	91.0	90.0	1.12	16.0	99	100.9	109.2	107.1
16	Pioneer Hi-Bred 307.....	90.6	89.6	1.10	16.1	99	100.9	108.7	106.8
17	Illinois Hybrid 885A (Pfeifer).....	91.8	90.7	1.16	17.1	94	95.8	110.1	106.5
18	*Null Hybrid N-81.....	90.9	90.3	.62	18.0	95	96.8	109.6	106.4
19	Illinois Hybrid 206 (Henley).....	89.1	88.8	.35	15.6	100	101.9	107.8	106.3
20	*Pfeifer Hybrid A-1-40.....	89.2	88.4	.92	16.4	100	101.9	107.3	106.0
21	DeKalb Hybrid 816.....	89.0	88.3	.84	17.0	100	101.9	107.2	105.9
22	Illinois Hybrid 200 (Wilson).....	88.6	88.5	.12	15.9	100	101.9	107.4	105.8
23	Pioneer Hi-Bred 333.....	87.5	86.7	.95	15.7	99	100.9	105.2	104.1
24	DeKalb Experimental Hybrid 83.....	87.4	86.3	1.28	17.9	100	101.9	104.7	104.0
25	Illinois Hybrid 450 (Whisnand).....	87.1	86.9	.25	18.5	93	94.8	105.5	102.8
26	DeKalb Experimental Hybrid 87.....	87.8	86.0	2.06	19.4	95	96.8	104.4	102.5
27	Illinois Hybrid 566 (Pocklington).....	84.7	84.2	.56	18.8	99	100.9	102.2	101.9
28	Iowaalt Hybrid 28N.....	85.0	84.4	.72	17.7	97	98.9	102.4	101.5
29	*Bear Hybrid OK-93.....	87.1	83.7	3.90	18.0	98	99.9	101.6	101.2
29	Funk Hybrid G-135.....	83.8	83.5	.33	19.2	99	100.9	101.3	101.2
31	Funk Hybrid G-46.....	84.1	83.3	1.01	19.0	98	99.9	101.1	100.8
32	DeKalb Hybrid 888.....	83.1	82.4	.83	16.8	100	101.9	100.0	100.5
33	Funk Hybrid G-83.....	82.3	82.2	.14	19.5	99	100.9	99.8	100.1
34	Illinois Hybrid 448 (Dallmaier).....	82.1	81.7	.51	19.0	100	101.9	99.2	99.9
35	DeKalb Hybrid 899.....	81.5	81.1	.50	20.3	100	101.9	98.4	99.3
36	Funk Hybrid G-88.....	80.8	80.3	.60	20.5	100	101.9	97.5	98.6
37	*Bear Hybrid OK-98.....	81.9	81.5	.48	19.4	95	96.8	98.9	98.4
37	M-L Hybrid 830 (Moews-Lowe).....	80.9	80.1	.99	17.1	100	101.9	97.2	98.4
39	Funk Hybrid G-84.....	81.5	81.1	.45	17.5	96	97.9	98.4	98.3
40	Iowaalt Hybrid 29A.....	79.1	78.9	.26	18.5	100	101.9	95.8	97.3
41	Illinois Hybrid 877 (Burrus).....	80.2	80.1	.16	19.5	95	96.8	97.2	97.1
41	*Null Hybrid N-28.....	79.1	78.7	.46	17.4	100	101.9	95.5	97.1
43	Crow Hybrid 804.....	80.3	78.6	2.14	17.4	100	101.9	95.4	97.0
44	*Null-Vollmer Hybrid NV-96 (Vollmer).....	79.1	78.3	.95	18.3	100	101.9	95.0	96.7
45	Richbred Hybrid 1002.....	78.1	77.8	.36	18.3	98	99.9	94.4	95.8
46	*E. W. Doubet Hybrid D16.....	78.2	77.9	.32	16.5	97	98.9	94.5	95.6
47	Pioneer Hi-Bred 332A.....	78.6	75.5	3.93	17.7	100	101.9	91.6	94.2
48	Bear Hybrid OK-78.....	76.3	75.8	.64	18.0	98	99.9	92.0	94.0
49	Illinois Hybrid 784 (Burrus).....	77.4	75.6	2.35	18.0	97	98.9	91.7	93.5
50	*Funk Hybrid G-99.....	75.1	74.6	.71	19.2	100	101.9	90.5	93.4
51	Illinois Hybrid 784 (Pocklington).....	72.3	71.9	.58	20.0	100	101.9	87.3	91.0
52	Illinois Hybrid 863 (Burrus).....	74.6	74.0	.82	19.5	92	93.8	89.8	90.8
52	Crow Hybrid 806.....	72.9	71.8	1.54	19.2	100	101.9	87.1	90.8
54	Funk Hybrid G-80.....	71.6	70.1	2.04	19.0	100	101.9	85.1	89.3
55	Rice White Dent.....	65.9	65.5	.60	17.8	90	91.7	79.5	82.6
56	Crow Hybrid 701 (W).....	62.9	62.7	.28	18.5	99	100.9	76.1	82.3
57	Shuman Golden Beauty.....	56.2	56.0	.42	16.7	96	97.9	68.0	75.5
●	Average of 5 open-pollinated varieties.....	57.1	56.9	.38	18.5	92.4	94.2	69.1	75.4
58	Wilson Yellow Dent.....	57.4	57.3	.25	20.3	91	92.8	69.5	75.3
59	Canterbury Yellow Dent.....	56.8	56.6	.28	18.8	92	93.8	68.7	75.0
60	Bunning White Dent.....	49.4	49.2	.34	18.8	93	94.8	59.7	68.5
Average of all entries.....		83.0	82.4	.87	17.9	98.1	....	....	....

*Less than 5 bushels of seed sampled.

A difference of less than 5.5 bushels between total yields of any two entries in this table is not significant.

Table 22.—SOUTHERN ILLINOIS: Shobonier

Rank	Entry	Acre-yield		Damaged in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
1940		bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	Pioneer Hi-Bred 313.....	30.3	29.4	2.98	14.2	89	109.6	117.1	115.2
2	Illinois Hybrid 863 (Canterbury).....	30.7	29.7	3.18	16.1	79	97.3	118.3	113.1
3	Sager Hybrid 33 (W).....	31.8	31.3	1.66	16.3	62	76.4	124.7	112.6
4	Illinois Hybrid 877 (Castle).....	30.0	29.2	2.77	18.3	81	99.8	116.3	112.2
5	Funk Hybrid G-135.....	29.2	28.4	2.89	18.1	82	101.0	113.1	110.1
6	DeKalb Experimental Hybrid 92.....	29.6	28.3	4.25	18.7	80	98.5	112.8	109.2
7	DeKalb Experimental Hybrid 93.....	27.9	26.8	3.95	18.2	94	115.8	106.8	109.1
8	Iowa Hybrid 28N.....	28.6	27.8	2.75	16.0	84	103.4	110.8	109.0
8	Illinois Hybrid 885A (Nickel Bros.).....	28.4	27.5	3.34	14.9	87	107.1	109.6	109.0
10	Crow Hybrid 806.....	29.1	27.8	4.50	19.9	81	99.8	110.8	108.1
11	Illinois Hybrid 784 (Whisnand).....	29.0	28.3	2.57	20.4	76	93.6	112.8	108.0
12	DeKalb Hybrid 899.....	29.2	27.7	5.14	18.5	80	98.5	110.4	107.4
12	Illinois Hybrid 206 (Burrus).....	28.3	27.5	2.70	17.6	82	101.0	109.6	107.4
14	*Illinois Hybrid 838 (I.H.P.).....	27.5	26.8	2.42	17.8	88	108.4	106.8	107.2
15	Illinois Hybrid 448 (Pocklington).....	29.1	28.5	1.90	20.6	71	87.4	113.5	107.0
16	Illinois Hybrid 784 (Pfeifer).....	29.1	27.7	4.70	20.1	78	96.1	110.4	106.8
17	*Bear Hybrid OK-95.....	29.1	28.2	3.22	20.2	78	96.1	109.5	106.2
18	Illinois Hybrid 200 (Pfeifer).....	27.0	26.1	3.35	15.4	89	109.6	104.0	105.4
19	Bear Hybrid OK-80.....	28.4	26.9	5.15	16.3	80	98.5	107.2	105.0
20	Richbred Hybrid 1002.....	28.1	27.6	1.80	19.8	72	88.7	110.0	104.7
21	Funk Hybrid G-123.....	27.3	26.6	2.48	18.3	81	99.8	106.0	104.4
22	Hoosier Crost Hybrid 1005.....	26.4	25.8	2.28	17.5	88	108.4	102.8	104.2
23	*Funk Hybrid G-580 (W).....	28.0	26.8	4.12	17.8	77	94.8	106.8	103.8
24	*Bear Hybrid OK-45.....	26.8	26.1	2.58	16.1	81	99.8	104.0	103.0
24	*Pioneer Hi-Bred 300.....	27.2	25.8	5.02	15.4	84	103.4	102.8	103.0
26	*Illinois Hybrid 450 (Morgan).....	27.3	26.4	3.16	20.4	77	94.8	105.2	102.6
27	Funk Hybrid G-83.....	26.7	25.0	6.30	24.0	88	108.4	99.6	101.8
27	Pioneer Hi-Bred 307.....	26.2	25.0	4.58	14.2	88	108.4	99.6	101.8
29	DeKalb Hybrid 888.....	27.3	25.5	6.48	18.9	81	99.8	101.6	101.2
29	Funk Hybrid G-88.....	26.2	25.4	3.14	24.0	82	101.0	101.2	101.2
31	Illinois Hybrid 247 (Canterbury).....	25.6	24.2	5.35	14.6	91	112.1	96.4	100.3
32	DeKalb Hybrid 816.....	26.2	24.9	4.89	16.0	84	103.4	99.0	100.1
33	*Bear Hybrid OK-98.....	26.7	25.2	5.67	18.9	79	97.3	100.4	99.6
34	Illinois Hybrid 200 (Castle).....	24.5	24.1	1.56	15.8	89	109.6	96.0	99.4
35	Funk Hybrid G-90.....	25.9	24.1	7.09	19.2	86	105.9	96.0	98.5
37	DeKalb Experimental Hybrid 83.....	24.4	23.6	3.48	19.4	91	112.1	94.0	98.5
37	Macon Hybrid 666.....	24.7	23.1	6.54	15.8	89	109.6	92.0	97.9
38	Bear Hybrid OK-78.....	26.4	24.5	7.12	19.2	80	98.5	97.6	97.8
39	Illinois Hybrid 805 (Holmes).....	23.9	23.4	2.26	20.9	90	110.8	93.2	97.6
40	DeKalb Hybrid 892.....	25.7	23.8	7.29	18.7	85	104.7	94.8	97.3
41	Pioneer Hi-Bred 332A.....	23.5	22.4	4.79	16.7	97	119.5	89.2	96.8
42	M-L Hybrid 830 (Moews-Lowe).....	23.9	23.3	2.38	16.9	88	108.4	92.8	96.7
43	*Pioneer Hi-Bred 332.....	23.5	22.5	4.13	14.8	95	117.0	89.6	96.4
44	*Illinois Hybrid 802 (I.H.P.).....	24.9	24.0	3.71	20.2	78	96.1	95.6	95.7
45	U. S. Hybrid 13 (Canterbury).....	26.0	24.1	7.35	15.8	76	93.6	96.0	95.4
45	*Illinois Hybrid 804 (I.H.P.).....	26.1	23.9	8.43	16.8	78	96.1	95.2	95.4
47	DeKalb Hybrid 922 (W).....	24.1	23.6	2.10	22.3	79	97.3	94.0	94.8
48	Illinois Hybrid 784 (Castle).....	25.9	23.7	8.36	16.8	76	93.6	94.4	94.2
49	Iowa Hybrid 29B.....	24.1	23.0	4.42	16.3	82	101.0	91.6	94.0
50	Iowa Hybrid 29A.....	23.6	22.7	3.96	19.6	83	102.2	90.4	93.4
51	DeKalb Hybrid 894.....	24.7	22.2	10.23	19.2	87	107.1	88.4	93.1
52	McLurkin White Dent.....	24.5	22.5	8.26	25.7	70	86.2	89.6	88.8
53	Funk Hybrid G-80.....	22.3	21.2	4.99	21.0	82	101.0	84.5	88.6
54	Champion White Pearl.....	22.0	21.5	2.34	22.0	75	92.4	85.7	87.4
55	Mohawk.....	22.4	21.7	2.95	25.1	71	87.4	86.5	86.7
56	Funk Hybrid G-84.....	21.8	20.9	4.34	20.1	75	92.4	83.3	85.6
57	*Illinois Hybrid 800 (I.H.P.).....	21.8	20.7	5.18	28.4	76	93.6	82.5	85.3
●	Average of 5 open-pollinated varieties.....	22.4	21.2	5.42	23.5	69.6	85.7	84.5	84.8
58	DeKalb Hybrid 919 (W).....	21.4	20.8	2.62	20.9	70	86.2	82.9	83.7
59	St. Charles White.....	22.6	20.7	8.43	21.0	62	76.4	82.5	81.0
60	Blackhawk.....	20.7	19.6	5.12	23.8	70	86.2	78.1	80.1
Average of all entries.....		26.2	25.1	4.34	18.8	81.2	....	....	....

*Less than 5 bushels of seed sampled.

A difference of less than 6.3 bushels between total yields of any two entries in this table is not significant.

Table 23.—SOUTHERN ILLINOIS: Shobonier Summaries

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
(A) Average yield of entries grown in 1939 and 1940									
		bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	Illinois Hybrid 877.....	45.1	44.3	2.00	15.1	89.0	101.4	110.5	108.2
2	Sager Hybrid 33 (W).....	46.0	45.5	1.18	14.0	80.0	91.1	113.5	107.9
3	Illinois Hybrid 885A.....	44.0	43.0	2.56	13.1	93.0	105.9	107.2	106.9
4	Pioneer Hi-Bred 313.....	42.5	42.0	1.64	12.8	99.5	113.3	104.7	106.8
5	Funk Hybrid G-123.....	44.7	43.4	2.83	15.2	89.0	101.4	108.2	106.5
6	Illinois Hybrid 200.....	42.9	42.5	1.05	14.2	93.0	105.9	106.0	106.0
7	Iowath Hybrid 29A.....	43.1	42.3	2.57	15.5	90.5	103.1	105.5	104.9
8	Illinois Hybrid 784.....	44.1	42.8	3.62	15.2	85.4	97.3	106.7	104.4
9	Bear Hybrid OK-78.....	43.4	42.1	4.15	15.4	89.5	101.9	105.0	104.2
10	Bear Hybrid OK-80.....	43.3	42.2	3.11	14.1	88.0	100.2	105.2	104.0
11	Illinois Hybrid 838.....	42.2	41.4	2.01	15.8	92.0	104.8	103.4	103.8
12	DeKalb Hybrid 922 (W).....	42.5	42.0	1.56	17.6	87.5	99.7	104.7	103.4
13	DeKalb Hybrid 892.....	42.6	41.3	4.11	15.2	91.5	104.2	103.0	103.3
14	Funk Hybrid G-135.....	42.4	41.6	2.30	15.4	88.5	100.8	103.7	103.0
15	DeKalb Hybrid 899.....	42.9	41.8	3.06	16.2	87.0	99.1	104.2	102.9
16	DeKalb Hybrid 888.....	42.6	41.4	3.79	15.2	89.5	101.9	103.2	102.9
17	U. S. Hybrid 13 (Henley).....	42.5	41.2	4.28	13.6	88.0	100.2	102.4	101.8
18	Funk Hybrid G-90.....	41.6	40.4	4.12	15.8	91.5	104.2	100.7	101.6
19	Iowath Hybrid 28N.....	41.5	40.9	1.74	14.4	85.9	97.8	102.0	101.0
20	DeKalb Hybrid 816.....	40.8	39.6	3.58	14.0	92.0	104.8	98.8	100.3
21	DeKalb Hybrid 894.....	40.5	39.0	5.56	16.2	92.0	104.8	97.3	99.2
22	Funk Hybrid G-84.....	39.2	38.5	2.58	15.9	87.0	99.1	96.0	96.8
23	Funk Hybrid G-88.....	38.3	37.7	1.94	17.6	90.5	103.1	94.0	96.3
24	Funk Hybrid G-80.....	38.1	37.4	2.72	16.8	90.5	103.1	93.3	95.8
25	DeKalb Hybrid 919 (W).....	37.3	36.6	1.97	16.7	82.0	93.4	91.3	91.8
26	St. Charles White.....	38.1	36.8	4.88	17.8	77.0	87.7	91.8	90.8
27	Mohawk.....	36.4	35.5	2.66	19.1	83.0	94.5	88.5	90.0
28	McLurkin White Dent.....	36.4	35.2	4.74	19.8	82.5	94.0	87.8	89.4
●	Average of 5 open-pollinated varieties.....	35.7	34.8	3.32	18.6	80.6	91.8	86.8	88.1
29	Champion White Pearl.....	33.6	33.0	1.95	18.1	85.0	96.8	82.3	85.9
30	Blackhawk.....	33.6	33.0	2.84	19.2	75.5	86.0	82.3	83.2
Average of all entries.....		41.1	40.1	2.90	15.8	87.8	....	....	....
(B) Average yield of entries grown in 1938, 1939, 1940									
		bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	Illinois Hybrid 784.....	47.1	46.2	2.46	16.5	79.2	103.0	111.3	109.2
2	Illinois Hybrid 877.....	45.4	44.8	1.56	14.1	79.3	103.1	108.0	106.8
3	DeKalb Hybrid 922 (W).....	43.1	42.8	1.16	16.7	80.6	104.8	103.1	103.5
4	Funk Hybrid G-90.....	42.7	41.8	2.90	14.5	83.0	107.9	100.7	102.5
5	St. Charles White.....	43.3	42.2	3.66	17.1	71.0	92.3	101.7	99.4
6	Pioneer Hi-Bred 313.....	39.4	39.1	1.22	12.3	78.3	101.8	94.2	96.1
●	Average of 5 open-pollinated varieties.....	39.9	39.2	2.38	17.8	72.6	94.4	94.5	94.5
7	Champion White Pearl.....	38.6	38.1	1.49	17.8	75.5	98.2	91.8	93.4
8	Blackhawk.....	37.7	37.2	1.90	18.9	68.0	88.4	89.6	89.3
Average of all entries.....		42.2	41.5	2.04	16.0	76.9	....	....	....
(C) Average yield of entries grown in 1937, 1938, 1939, 1940									
		bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	Funk Hybrid G-90.....	36.1	35.4	2.21	14.6	72.5	116.4	105.4	108.2
2	St. Charles White.....	36.8	36.0	2.74	17.6	59.1	94.9	107.1	104.1
●	Average of 5 open-pollinated varieties.....	33.2	32.7	1.79	17.9	60.0	96.3	97.3	97.1
3	Champion White Pearl.....	32.2	31.9	1.12	18.3	63.9	102.6	94.9	96.8
4	Blackhawk.....	31.7	31.3	1.43	19.0	53.6	86.0	93.2	91.4
Average of all entries.....		34.2	33.6	1.88	17.4	62.3	....	....	....

Table 24.—SOUTHEASTERN ILLINOIS: Albion

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
	1940	bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	Pioneer Hi-Bred 333.....	79.7	78.6	1.39	13.6	56	187.3	105.5	126.0
2	*Pioneer Hi-Bred 300.....	84.9	84.0	1.03	13.9	40	133.9	112.8	118.1
3	DeKalb Experimental Hybrid 92.....	85.7	84.6	1.32	15.2	37	123.7	113.6	116.1
4	*Funk Hybrid G-580 (W).....	75.5	75.0	.70	14.7	48	169.5	100.7	115.6
5	Illinois Hybrid 247 (Canterbury).....	86.7	86.4	.40	14.6	34	113.7	116.0	115.4
6	Pioneer Hi-Bred 332.....	85.1	84.6	.55	15.6	35	117.1	113.6	114.5
7	Pioneer Hi-Bred 332A.....	79.6	79.1	.63	15.2	41	137.1	106.2	113.9
8	*Illinois Hybrid 806 (Henley).....	70.0	69.0	1.44	15.9	53	177.3	92.6	113.8
9	Funk Hybrid G-88.....	70.3	70.2	.18	17.7	51	170.6	94.2	113.3
10	*Bear Hybrid OK-99.....	87.5	86.8	.80	15.3	26	87.0	116.5	109.1
11	DeKalb Hybrid 888.....	77.7	77.1	.73	15.1	37	123.7	103.5	108.6
12	Funk Hybrid G-528 (W).....	85.1	84.8	.38	14.7	27	90.3	113.8	107.9
13	DeKalb Experimental Hybrid 83.....	82.2	80.4	2.20	15.0	32	107.0	107.9	107.7
14	Bear Hybrid OK-68.....	75.7	75.5	.25	13.6	37	123.7	101.3	106.9
15	Funk Hybrid G-135.....	72.5	71.6	1.31	16.7	39	130.4	96.1	104.7
16	DeKalb Experimental Hybrid 93.....	83.9	82.2	2.02	14.9	26	87.0	110.3	104.5
17	Pioneer Hi-Bred 313.....	81.3	80.9	.55	20.0	27	90.3	108.6	104.0
18	DeKalb Hybrid 816.....	80.4	77.5	3.57	13.9	31	103.7	104.0	103.9
19	*Henley & Whisnand Hybrid 883 (Henley).....	73.9	73.3	.83	15.1	36	120.4	98.4	103.9
20	Illinois Hybrid 200 (Whisnand).....	81.9	80.7	1.52	14.1	27	90.3	108.3	103.8
21	Iowaleth Hybrid 29A.....	79.1	78.4	.84	14.4	29	97.0	105.2	103.2
22	Funk Hybrid G-527 (W).....	72.6	72.4	.26	15.9	36	120.4	97.2	103.0
23	Illinois Hybrid 448 (Dailey).....	76.2	75.7	.63	16.7	30	100.3	101.6	101.3
24	Illinois Hybrid 863 (Canterbury).....	85.9	85.2	.76	14.6	18	60.2	114.4	100.8
25	Funk Hybrid G-83.....	73.7	73.4	.46	16.4	32	107.0	98.5	100.6
26	Illinois Hybrid 805 (Holmes).....	83.1	82.0	1.32	14.0	21	70.2	110.1	100.1
27	Hoosier Crost Hybrid 1005.....	74.5	73.5	1.30	14.2	31	103.7	98.7	100.0
28	*Bear Hybrid OK-98.....	83.8	83.1	.83	15.2	19	63.5	111.5	99.5
29	*E. W. Doubet Hybrid D48.....	76.2	74.7	1.95	14.7	29	97.0	100.3	99.5
30	DeKalb Hybrid 899.....	71.6	71.3	.42	15.9	33	110.4	95.7	99.4
31	Pioneer Hi-Bred 307.....	80.9	78.3	3.22	13.8	24	80.3	105.1	98.9
32	Waddell Utility White Dent.....	66.8	66.6	.36	15.4	38	127.1	89.4	98.8
33	Illinois Hybrid 784 (Dallmier).....	76.6	75.6	1.33	16.7	27	90.3	101.5	98.7
34	DeKalb Experimental Hybrid 87.....	82.0	80.8	1.44	16.0	20	66.9	108.5	98.1
35	*Bear Hybrid OK-96.....	82.6	81.2	1.73	16.1	19	63.5	109.0	97.6
36	Funk Hybrid G-84.....	70.5	70.2	.42	16.6	32	107.0	94.2	97.4
37	Iowaleth Hybrid TX 1.....	69.3	69.1	.27	18.6	33	110.4	92.8	97.2
38	Crow Hybrid 806.....	75.1	73.8	1.74	15.2	27	90.3	99.1	96.9
39	Crow Hybrid 701 (W).....	71.2	71.0	.31	16.4	30	100.3	95.3	96.6
39	DeKalb Hybrid 922 (W).....	63.4	62.7	1.15	17.1	40	133.8	84.2	96.6
41	Illinois Hybrid 877 (Dallmier).....	78.6	78.2	.57	14.9	20	66.9	105.0	95.5
42	Iowaleth Hybrid 28N.....	79.3	79.0	.32	14.9	13	43.5	106.0	90.4
43	DeKalb Hybrid 884.....	77.5	77.3	.27	15.4	14	46.8	103.8	89.6
44	Illinois Hybrid 450 (Castle).....	72.9	71.4	2.04	17.3	21	70.2	95.8	89.4
45	DeKalb Experimental Hybrid 88.....	77.2	76.9	.34	15.2	14	46.8	103.2	89.1
46	Illinois Hybrid 885A (Castle).....	77.8	76.7	1.47	14.2	11	36.8	103.0	86.4
46	DeKalb Hybrid 919 (W).....	62.2	60.9	2.06	16.0	30	100.3	81.7	86.4
48	DeKalb Hybrid 894.....	68.3	66.8	2.20	16.5	22	73.6	89.7	85.7
●	Average of 6 open-pollinated varieties.....	58.3	58.0	.37	16.2	28	93.7	77.9	81.9
49	Champion White Pearl.....	49.8	49.3	.98	16.8	38	127.1	66.2	81.4
50	McLurkin White Dent.....	50.8	50.7	.22	17.5	36	120.4	68.1	81.2
51	Wilson Yellow Dent.....	65.0	64.9	.20	15.7	18	60.2	87.1	80.4
52	St. Charles White.....	59.2	58.9	.56	15.6	25	83.6	79.1	80.2
53	Waddell Utility Yellow Dent.....	58.2	57.8	.64	16.2	13	43.5	77.6	69.1
Average of all entries.....		75.3	74.5	1.03	15.6	29.9	....	....	....

*Less than 5 bushels of seed sampled. ¹Average of 9 plots instead of 10.

A difference of less than 5.5 bushels between total yields of any two entries in this table is not significant.

Table 25.—SOUTHEASTERN ILLINOIS: Albion Summaries

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
(A) Average yield of entries grown in 1939 and 1940									
		bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	Funk Hybrid G-528 (W).....	78.8	77.2	2.17	13.1	63.5	100.8	112.4	109.5
2	Bear Hybrid OK-68.....	76.7	74.6	2.72	11.8	68.0	107.9	108.6	108.4
3	Pioneer Hi-Bred 313.....	77.6	75.6	2.60	15.4	63.0	100.0	110.0	107.5
4	E. W. Doubet Hybrid D48.....	76.6	75.1	2.04	12.9	64.0	101.6	109.3	107.4
5	DeKalb Hybrid 888.....	75.2	73.2	2.84	12.8	68.0	107.9	106.5	106.8
6	Funk Hybrid G-83.....	75.1	73.2	2.43	13.9	66.0	104.8	106.5	106.1
7	Iowaleth Hybrid 29A.....	75.4	73.3	2.86	13.1	64.5	102.4	106.7	105.6
8	Funk Hybrid G-84.....	72.2	71.1	1.48	13.7	66.0	104.8	103.5	103.8
9	Crow Hybrid 806.....	73.9	72.4	1.94	13.4	62.0	98.4	105.4	103.6
10	Iowaleth Hybrid 28N.....	74.9	74.0	1.24	12.8	56.5	89.7	107.7	103.2
11	DeKalb Hybrid 899.....	71.8	69.8	2.87	13.6	66.5	105.6	101.6	102.6
12	Funk Hybrid G-135.....	72.2	69.8	3.38	14.2	64.5	102.4	101.6	101.8
13	DeKalb Hybrid 816.....	74.0	69.0	7.14	12.4	65.5	104.0	100.4	101.3
14	Illinois Hybrid 885A.....	76.5	72.6	5.30	12.4	55.0	87.3	105.7	101.1
15	Funk Hybrid G-527 (W).....	69.8	69.0	1.22	13.6	64.5	102.4	100.4	100.9
16	Waddell Utility White Dent.....	66.8	66.4	.69	13.4	66.0	104.8	96.7	98.7
17	Crow Hybrid 701 (W).....	67.8	65.4	3.75	13.8	64.5	102.4	95.2	97.0
18	DeKalb Hybrid 894.....	68.4	67.0	2.10	13.6	60.0	95.2	97.5	96.9
19	DeKalb Hybrid 922 (W).....	63.8	62.2	2.46	14.2	69.0	109.5	90.5	95.2
20	DeKalb Hybrid 919 (W).....	64.0	62.2	2.76	13.7	64.5	102.4	90.5	93.5
21	Wilson Yellow Dent.....	63.2	62.8	.70	13.2	54.5	86.5	91.4	90.2
21	St. Charles White.....	61.6	61.0	.90	13.6	59.5	94.4	88.8	90.2
●	Average of 5 open-pollinated varieties.....	60.1	59.5	.81	13.8	60.4	95.9	86.6	88.9
23	Waddell Utility Yellow Dent.....	59.2	58.6	.99	13.4	52.5	83.3	85.3	84.8
24	McLurkin White Dent.....	54.6	53.2	.82	15.2	64.5	102.4	77.4	83.6
	Average of all entries.....	70.4	68.7	2.39	13.5	63.0	....	....	....
(B) Average yield of entries grown in 1938, 1939, 1940									
1	Funk Hybrid G-528 (W).....	85.1	83.8	1.52	13.1	69.3	99.0	113.9	110.2
2	Pioneer Hi-Bred 313.....	80.4	78.7	2.24	14.7	73.3	104.7	106.9	106.4
3	Funk Hybrid G-527 (W).....	76.5	75.6	1.21	13.7	72.7	103.9	102.7	103.0
4	DeKalb Hybrid 922 (W).....	73.3	72.3	1.65	14.8	76.3	109.0	98.2	100.9
5	Crow Hybrid 701 (W).....	73.7	72.0	2.58	14.0	73.0	104.3	97.8	99.4
6	St. Charles White.....	69.3	68.9	.67	14.0	69.3	99.0	93.6	95.0
7	Wilson Yellow Dent.....	70.3	69.7	.95	13.2	64.3	91.9	94.7	94.0
●	Average of 5 open-pollinated varieties.....	67.0	66.5	.72	14.1	67.9	97.0	90.4	92.1
8	Waddell Utility White Dent.....	67.9	67.5	.61	14.0	61.7	88.1	91.7	90.8
	Average of all entries.....	74.5	73.6	1.43	13.9	70.0	....	....	....

Table 26.—SOUTHEASTERN ILLINOIS: Albion, Resistance to Lodging Caused by Feeding of Corn Rootworms¹

Rank	Entry	Resistance rating com- pared with averages ³ (hybrids only)	Plants leaning more than 45 degrees	Plants leaning 30 degrees or more ²	Resistance rating com- pared with averages ³ (hybrids only)
		perct.	perct.	perct.	
1940					
1	DeKalb Hybrid 899	272	2.6	35.9	97
2	Illinois Hybrid 877 (Dallmer)	220	1.9	36.5	97
3	DeKalb Experimental Hybrid 83	172	1.6	40.4	94
4	Henley and Wheland Hybrid 883 (Henley)	152	2.6	38.5	93
5	Funk Hybrid G-580 (W)	145	2.5	33.3	92
6	Hooser Crost Hybrid 1005	143	1.8	37.0	88
7	DeKalb Hybrid 884	140	2.6	48.0	87
8	DeKalb Experimental Hybrid 93	139	2.5	47.6	87
9	Illinois Hybrid 247 (Canterbury)	134	4.7	41.2	85
10	DeKalb Experimental Hybrid 87	133	4.9	39.1	85
11	Crow Hybrid 701W	126	3.3	45.1	78
12	Illinois Hybrid 806 (Henley)	125	4.6	44.2	77
13	Bear Hybrid OK-98	124	4.4	49.7	76
14	DeKalb Hybrid 816	123	3.1	45.2	73
15	DeKalb Experimental Hybrid 92	119	3.9	45.6	70
16	DeKalb Hybrid 919 (W)	117	3.1	49.3	69
17	Illinois Hybrid 805 (Holmes)	116	3.1	49.8	68
18	Bear Hybrid OK-68	112	1.9	52.1	60
19	Illinois Hybrid 784 (Dallmer)	111	4.3	58.2	49
20	Illinois Hybrid 200 (Wheland)	110	2.5	.....	.....
21	Funk Hybrid G-528 (W)	109	3.7	35.7	100
22	DeKalb Experimental Hybrid 88	107	3.5	.....	.....
23	Illinois Hybrid 450 (Castle)	106	3.1	40.4	2.9
24	Illinois Hybrid 448 (Dailey)	105	8.1	32.0	2.6
25	Bear Hybrid OK-99	103	5.0	26.4	5.5
26	Crow Hybrid 806	102	5.8	25.2	2.0
27	Lowealth Hybrid 28N	101	4.8	31.3	7.2
28	Lowealth Hybrid Txi	97	4.0	25.2	.....
Average of hybrid entries.....					
48	McJunkin White Dent.....			40.4	2.9
49	Waddell Utility Yellow Dent			32.0	2.6
50	St. Charles White			26.4	5.5
51	Waddell Utility White Dent			25.2	2.0
52	Wilson Yellow Dent			31.3	7.2
53	Champion White Pearl.....			25.2	.....

¹*Diabrotica duodecimpunctata* (F.) and *Diabrotica longicornis* (Say). ²A difference of less than 8.2 in this column is not significant. ³High rating indicates better standing ability.

Table 27.—SOUTHWESTERN ILLINOIS: Modoc

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Moisture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
1940		bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	¹ Pioneer Hi-Bred 313.....	76.1	75.8	.36	12.5	94	107.6	110.6	109.8
2	¹ Funk Hybrid G-46.....	75.6	75.5	.14	14.2	89	101.8	110.2	108.1
3	¹ Bear Hybrid OK-39.....	75.0	74.7	.35	14.4	90	103.0	109.0	107.5
4	¹ Pioneer Hi-Bred 332A.....	73.5	72.8	.93	14.5	96	109.8	106.3	107.2
5	¹ Bear Hybrid OK-99.....	76.1	75.7	.46	14.6	84	96.1	110.5	106.9
5	¹ DeKalb Experimental Hybrid 92.....	73.5	73.1	.52	14.0	94	107.6	106.7	106.9
7	¹ Funk Hybrid G-83.....	74.8	74.3	.63	15.5	87	99.5	108.4	106.2
8	¹ Bear Hybrid OK-98.....	75.4	74.6	1.04	15.1	84	96.1	108.9	105.7
8	U. S. Hybrid 13 (Pocklington).....	73.1	72.3	1.11	13.5	93	106.4	105.5	105.7
10	¹ DeKalb Hybrid 899.....	74.4	74.0	.49	15.9	86	98.4	108.0	105.6
11	¹ Pfeifer Hybrid A-1-40.....	75.1	74.7	.50	14.2	83	95.0	109.0	105.5
12	Illinois Hybrid 863 (Canterbury).....	75.4	74.8	.84	14.2	82	93.8	109.2	105.4
13	¹ DeKalb Hybrid 888.....	72.8	72.6	.34	14.6	90	103.0	106.0	105.2
13	¹ Illinois Hybrid 838 (Pocklington).....	72.7	72.3	.50	14.4	91	104.1	105.5	105.2
15	¹ DeKalb Experimental Hybrid 93.....	72.4	71.4	1.35	14.0	94	107.6	104.2	105.1
16	¹ Illinois Hybrid 800 (I.H.P.).....	72.2	72.1	.10	15.5	91	104.1	105.2	104.9
17	Illinois Hybrid 450 (Whisnand).....	76.9	76.8	.10	15.8	71	81.2	112.1	104.4
18	Illinois Hybrid 206 (Burrus).....	71.4	71.2	.26	14.0	92	105.3	103.9	104.2
19	¹ Illinois Hybrid 804 (I.H.P.).....	72.2	72.1	.16	15.7	88	100.7	105.2	104.1
20	¹ DeKalb Hybrid 816.....	72.1	70.3	2.46	14.2	94	107.6	102.6	103.8
21	Illinois Hybrid 448 (Pfeifer).....	72.0	71.8	.33	16.8	86	98.4	104.8	103.2
21	Illinois Hybrid 247 (Canterbury).....	71.5	71.0	.71	15.4	89	101.8	103.6	103.2
23	Iowa Hybrid 29A.....	70.7	70.3	.62	13.7	91	104.1	102.6	103.0
23	Bear Hybrid OK-78.....	70.6	70.3	.37	13.4	91	104.1	102.6	103.0
25	¹ Pioneer Hi-Bred 300.....	70.6	69.9	.93	14.5	92	105.3	102.0	102.8
26	Hoosier Crost Hybrid 1005.....	70.3	70.0	.40	14.6	91	104.1	102.2	102.7
27	Illinois Hybrid 784 (Castle).....	73.7	73.6	.13	16.3	75	85.8	107.4	102.0
28	Illinois Hybrid 885A (Pfeifer).....	72.5	72.2	.34	14.7	80	91.5	105.4	101.9
29	Seeber Hybrid 55.....	70.6	69.9	.94	15.5	88	100.7	102.0	101.7
30	¹ Pioneer Hi-Bred 332.....	70.0	69.6	.53	14.9	89	101.8	101.6	101.6
31	¹ Funk Hybrid G-145.....	69.8	68.9	1.24	16.1	91	104.1	100.6	101.5
32	¹ Funk Hybrid G-527 (W).....	69.7	69.6	.18	16.8	86	98.4	101.6	100.8
32	Iowa Hybrid TX 1.....	69.7	69.3	.62	18.4	87	99.5	101.2	100.8
34	¹ National Hybrid 134.....	70.5	70.3	.24	15.9	83	95.0	102.6	100.7
35	Holmes Utility Hybrid 79.....	68.8	68.4	.58	15.1	90	103.0	99.8	100.6
36	Illinois Hybrid 448 (Whisnand).....	70.9	70.5	.62	15.9	80	91.5	102.9	100.1
36	¹ Crow Hybrid 701 (W).....	69.8	69.0	1.17	15.5	86	98.4	100.7	100.1
38	¹ Funk Hybrid G-135.....	69.8	69.3	.73	16.3	84	96.1	101.2	99.9
39	Iowa Hybrid TX 2.....	68.3	68.1	.20	16.8	87	99.5	99.4	99.4
40	¹ Pioneer Hi-Bred 333.....	67.4	66.8	.94	13.0	91	104.1	97.5	99.2
41	Illinois Hybrid 449 (Canterbury).....	70.9	70.3	.88	15.4	77	88.1	102.6	99.0
42	¹ Illinois Hybrid 802 (I.H.P.).....	67.0	66.5	.70	15.6	90	103.0	97.1	98.6
43	Illinois Hybrid 877 (Castle).....	70.2	69.8	.49	14.7	77	88.1	101.9	98.4
44	Crow Hybrid 806.....	69.0	67.4	2.38	16.0	85	97.3	98.4	98.1
45	Funk Hybrid G-88.....	67.1	66.8	.42	17.4	86	98.4	97.5	97.7
45	Illinois Hybrid 200 (Castle).....	65.5	64.7	1.14	14.2	94	107.6	94.4	97.7
47	Morgan Hybrid M-180.....	67.0	65.7	1.92	14.0	89	101.8	95.9	97.4
48	Hoosier Crost Hybrid 840.....	66.4	66.0	.57	13.0	87	99.5	96.3	97.1
49	¹ Funk Hybrid G-580 (W).....	64.5	64.1	.66	15.8	92	105.3	93.6	96.5
50	Iowa Hybrid 29.....	67.3	66.3	1.44	16.7	83	95.0	96.8	96.4
51	Funk Hybrid G-84.....	64.1	63.4	1.09	17.0	90	103.0	92.5	95.1
52	Leaming.....	63.5	63.0	.80	19.4	85	97.3	92.0	93.3
53	¹ Pioneer Hi-Bred 307.....	62.7	61.6	1.83	13.3	90	103.0	89.9	93.2
54	DeKalb Experimental Hybrid 89.....	59.3	58.5	1.42	13.8	94	107.6	85.4	91.0
55	¹ DeKalb Hybrid 922 (W).....	58.1	57.7	.68	17.1	91	104.1	84.2	89.2
56	Mohawk.....	54.8	54.5	.60	19.0	89	101.8	79.6	85.2
● Average of 5 open-pollinated varieties.....		55.4	55.1	.62	18.5	85.6	98.0	80.4	84.8
57	¹ DeKalb Hybrid 919 (W).....	57.4	56.6	1.40	15.6	79	90.4	82.6	84.6
58	McLurkin White Dent.....	55.5	54.9	.98	18.1	83	95.0	80.1	83.8
59	St. Charles White.....	51.1	51.0	.22	16.8	91	104.1	74.4	81.8
60	Champion White Pearl.....	52.2	51.9	.48	19.4	80	91.5	75.8	79.7
Average of all entries.....		69.0	68.5	.74	15.4	87.4	.....	.....	.....

*Less than 5 bushels of seed sampled. ¹Average of 7 plots instead of 8.

A difference of less than 8.0 bushels between total yields of any two entries in this table is not significant.

Table 28.—SOUTHWESTERN ILLINOIS: Modoc, Two-Year Summary

Rank	Entry	Acre-yield		Damaged corn in shelled sample	Mois- ture in grain at harvest	Erect plants	Rating for—		
		Total	Sound				Erect plants	Sound yield	General perform.
Average yield of entries grown in 1939 and 1940									
		bu.	bu.	perct.	perct.	perct.	perct.	perct.	
1	DeKalb Hybrid 899.....	78.2	77.0	1.60	15.4	91.9	100.7	112.2	109.3
2	Illinois Hybrid 450 (Whisnand).....	77.6	77.3	.29	15.6	85.0	93.1	112.7	107.8
2	Funk Hybrid G-83.....	76.6	75.2	1.64	15.4	93.5	102.4	109.6	107.8
4	Pioneer Hi-Bred 313.....	75.2	74.6	.80	13.6	94.5	103.5	108.7	107.4
5	Illinois Hybrid 448.....	74.7	74.2	.61	16.6	91.0	99.7	108.2	106.1
6	Funk Hybrid G-46.....	75.5	73.8	2.37	14.0	92.2	101.0	107.6	106.0
7	DeKalb Hybrid 816.....	72.8	71.0	2.53	14.1	97.0	106.2	103.5	104.2
8	Illinois Hybrid 863.....	73.1	72.0	1.52	15.2	89.4	97.9	105.0	103.2
8	DeKalb Hybrid 888.....	71.4	70.8	.72	14.5	94.4	103.4	103.2	103.2
10	Funk Hybrid G-527 (W).....	72.0	71.7	.36	16.5	90.0	98.6	104.5	103.0
11	Illinois Hybrid 784.....	72.4	72.0	.64	16.6	86.2	94.4	105.0	102.4
11	Illinois Hybrid 200.....	71.1	69.6	1.94	13.7	95.8	104.9	101.5	102.4
13	Funk Hybrid G-84.....	71.1	69.6	2.09	16.0	93.9	102.8	101.5	101.8
14	Illinois Hybrid 885A.....	72.0	71.1	1.24	14.3	87.2	95.5	103.6	101.6
15	Funk Hybrid G-135.....	71.0	69.6	2.04	16.2	91.8	100.5	101.5	101.2
16	Bear Hybrid OK-78.....	69.6	68.5	1.60	13.8	95.0	104.1	99.9	101.0
17	Iowea Hybrid 29A.....	70.1	68.9	1.74	14.3	92.7	101.5	100.4	100.7
18	DeKalb Hybrid 919 (W).....	64.3	63.6	1.15	15.4	87.6	95.9	92.7	93.5
19	Leaming.....	62.6	61.0	2.68	20.0	86.4	94.6	88.9	90.3
20	DeKalb Hybrid 922 (W).....	59.3	58.8	.82	17.5	91.6	100.3	85.7	89.4
21	St. Charles White.....	57.6	56.8	1.44	16.5	92.7	101.5	82.8	87.5
22	Mohawk.....	56.2	55.6	1.06	18.0	91.4	100.1	81.0	85.8
●	Average of 5 open-pollinated varieties.....	57.1	56.0	1.93	17.8	88.6	97.0	81.6	85.4
23	McLurkin White Dent.....	55.8	54.4	2.47	18.0	88.4	96.8	79.3	83.7
	Average of all entries.....	69.6	68.6	1.45	15.7	91.3	....	....	....

SOIL ADAPTATION TEST

For the sixth consecutive year studies were made at Sibley and Urbana to determine the adaptability and performance of hybrid corn on soils differing in their productivity. As in the previous years, two tests were conducted at each location, one on a highly productive soil and the other on a soil of medium or low productivity.

Season. Weather conditions in 1940 were not favorable for high yields at either of these locations, altho at Urbana the crop did not suffer as much from adverse weather as it did at Sibley. On the less productive area at Urbana yields were almost as high as in previous more favorable years. Lack of rainfall during most of the growing period was the main cause of low yields.

Soils. The fertile area at Sibley consists of a highly productive Proctor silt loam, and the less fertile area consists of a badly eroded plot of Elliott silt loam. These two soil types and the plots selected within each were good representatives of high and low states of soil productivity. A good crop of sweet clover, which furnished an ample supply of organic matter and of nitrogen, had been plowed down on the Proctor silt loam (high productivity) for the 1940 corn crop. The Elliott silt loam had been limed once and had grown a thin stand of sweet clover; but after a crop of corn had been grown in 1939, the fertility of the field was low. At Urbana the two areas, which are on the Agronomy south farm, differ in productivity as a result of the long-continued use of different cropping systems. In the Southwest rotation a high state of productivity has been maintained by systematically rotating corn, oats, clover hay, and wheat with a red-clover catch crop. The South-Central area has been depleted of fertility by a rotation of corn, corn, corn, and soybeans. Both plots at Urbana have received manure and phosphate. The Southwest rotation has had slightly more limestone than the South-Central. The soil type of the two fields is mainly Muscatine silt loam.

1940 results. In general, the moisture conditions in 1940 were more favorable to corn on soils of medium productivity than to corn on highly productive soils. On the highly fertile soils early growth was stimulated by a combination of a good supply of moisture and a high level of fertility; as a result, the shooting, or ear-making, period of the plant came when the soil was most dry. Where this occurred, ears failed to form and the stalks were barren. Varieties and strains of corn that are normally subject to barrenness were more severely damaged than those not so subject to barrenness. On the high-fertility area at Urbana, wherever the open-pollinated variety had three stalks to a hill, 39 percent of the stalks were barren, and where there were four stalks to a hill, 67 percent were barren. The five best hybrids showed much less barrenness—where there were three stalks to a hill

Table 29.—SOIL ADAPTATION TEST: Central Illinois, Sibley

Rank	Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Rating for—		
					Erect plants	General perform.	Total yield
PROCTOR SILT LOAM: Productivity high (Farm 41)							
		<i>bu.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>		<i>perct.</i>
1	Crow Hybrid 360A.....	61.9	17.3	92	101.1	117.4	122.8
2	Illinois Hybrid 805.....	54.4	18.5	88	96.7	105.1	107.9
3	Illinois Hybrid 374.....	54.3	19.9	86	94.5	104.4	107.7
4	Pioneer Hybrid 307.....	54.0	18.1	96	105.5	106.7	107.1
5	Illinois Hybrid 247.....	53.6	19.2	81	89.0	102.0	106.3
6	Illinois Hybrid 972.....	53.4	18.1	90	98.9	104.2	106.0
7	Illinois Hybrid 960.....	52.2	19.0	87	95.6	101.6	103.6
8	U. S. Hybrid 5.....	51.8	19.2	96	105.5	103.5	102.8
9	Mixture—U. S. 5 and Illinois 805.....	51.3	19.9	90	98.9	101.1	101.8
10	Sibley Farms Hybrid 73.....	50.8	18.3	85	93.4	99.0	100.8
11	Mixture—U. S. 5 and U. S. 13.....	50.7	19.8	98	107.7	102.4	100.6
12	Illinois Hybrid 201.....	50.5	17.9	95	104.4	101.2	100.2
13	Mixture—U. S. 5, U. S. 13, and Illinois 200.....	50.3	17.6	97	106.6	101.5	99.8
14	U. S. Hybrid 13.....	48.4	20.8	96	105.5	98.4	96.0
14	U. S. Hybrid 44.....	48.4	18.5	83	91.2	94.8	96.0
16	Illinois Hybrid 200.....	47.8	22.0	98	107.7	98.0	94.8
17	Sibley Farms Hybrid 753B.....	46.7	19.2	94	103.3	95.3	92.7
18	Sibley Farms Hybrid 588.....	45.7	22.0	88	96.7	92.2	90.7
19	Illinois Hybrid 21.....	44.9	20.8	96	105.5	93.2	89.1
20	● Station Yellow Dent.....	37.1	23.6	88	96.7	79.4	73.6
Average.....		50.4	19.5	91	.....	.....	.....
ELLIOTT SILT LOAM: Productivity low (Farm 92)							
1	Sibley Farms Hybrid 588.....	28.0	20.5				121.2
2	Crow Hybrid 360A.....	27.2	18.7				117.7
3	Illinois Hybrid 374.....	26.3	19.6				113.9
4	Pioneer Hybrid 307.....	26.0	19.1				112.6
5	Illinois Hybrid 972.....	25.8	18.5				111.7
6	Illinois Hybrid 247.....	25.5	19.4				110.4
7	Illinois Hybrid 201.....	24.9	18.3				107.8
8	Sibley Farms Hybrid 73.....	24.9	20.5				107.8
9	U. S. Hybrid 44.....	24.6	18.5				106.5
10	Mixture—U. S. 5 and Illinois 805.....	24.2	21.1				104.8
11	U. S. Hybrid 13.....	23.4	19.8				101.3
12	Illinois Hybrid 805.....	22.8	20.2				98.7
13	Illinois Hybrid 21.....	22.7	19.6				98.3
14	Illinois Hybrid 960.....	22.5	20.0				97.4
15	Mixture—U. S. 5, U. S. 13, and Illinois 200.....	22.3	22.4				96.5
16	Sibley Farms Hybrid 753B.....	20.8	21.1				90.0
17	Illinois Hybrid 200.....	19.1	20.8				82.7
18	U. S. Hybrid 5.....	18.6	18.1				80.5
19	Mixture—U. S. 5 and U. S. 13.....	18.2	20.2				78.8
20	● Station Yellow Dent.....	14.8	24.9				64.1
Average.....		23.1	20.1				.....

only 4 percent of the stalks were without ears, and where there were four stalks only 18 percent had no ears.

These data show that in dry seasons on highly fertile soils the yield of thickly planted good hybrids will not be reduced because of stalk barrenness nearly as much as will the yield of thickly planted open-pollinated varieties or of poor hybrids subject to barrenness.

Hybrids on the soil-adaptation fields performed about as they did in the dry season of 1936. Strains such as Illinois 960, Illinois 374, Sibley Farms 588, and Crow 360A, which are generally considered to be widely adapted and particularly suited to poor land, were among the top performers. This was to be expected, for in dry seasons lack

of moisture prevents plant foods from becoming easily available and brings good soil down to the level of poor soil.

Illinois 201 and 247 are newcomers that made a very good showing this year. However, 247 is very susceptible to stalk breaking, and like many of the other widely adapted hybrids it is not so desirable for planting on highly fertile soils, where stalk breaking is often much more severe than on soils of low or medium fertility.

Hybrids stood the drouth much better than the open-pollinated variety. This was particularly true on the high-fertility area at Ur-

Table 30.—SOIL ADAPTATION TEST: Central Illinois, Urbana

Rank	Entry	Total acre yield	Moisture in grain at harvest	Erect plants	Rating for—		
					Erect plants	General perform.	Total yield
MUSCATINE SILT LOAM: Productivity high (Southwest rotation)							
		<i>bu.</i>	<i>perct.</i>	<i>perct.</i>	<i>perct.</i>		<i>perct.</i>
1	Illinois Hybrid 247.....	88.3	19.2	90	97.9	110.3	114.4
2	Illinois Hybrid 201.....	85.0	17.9	96	104.5	108.7	110.1
3	Illinois Hybrid 960.....	84.4	19.0	85	92.5	105.1	109.3
4	Illinois Hybrid 374.....	84.0	19.9	85	92.5	104.7	108.8
5	U. S. Hybrid 5.....	83.0	19.2	100	108.8	107.8	107.5
6	Illinois Hybrid 21.....	81.1	20.8	100	108.8	106.0	105.1
7	Illinois Hybrid 805.....	78.7	18.5	84	91.4	99.3	101.9
8	U. S. Hybrid 13.....	77.6	20.8	93	101.2	100.7	100.5
9	Crow Hybrid 360A.....	76.8	17.3	86	93.6	98.0	99.5
10	Illinois Hybrid 200.....	74.8	22.0	100	108.8	99.9	96.9
11	Sibley Farms Hybrid 753B.....	72.2	19.2	98	106.6	96.8	93.5
12	● Station Yellow Dent.....	41.0	23.6	86	93.6	63.2	53.1
	Average.....	77.2	19.8	91.9	....	....	....
MUSCATINE SILT LOAM: Productivity medium (South central rotation)							
1	Illinois Hybrid 960.....	63.8	16.6	96	100.7	110.6	113.9
2	Illinois Hybrid 201.....	61.8	18.0	98	102.8	108.5	110.4
3	Illinois Hybrid 247.....	61.6	18.9	92	96.5	106.6	110.0
4	U. S. Hybrid 13.....	61.3	17.1	98	102.8	107.8	109.5
5	Illinois Hybrid 374.....	59.7	16.4	94	98.6	104.6	106.6
6	Illinois Hybrid 21.....	57.3	16.9	100	104.9	103.0	102.3
7	Crow Hybrid 360A.....	54.3	16.3	95	99.7	97.7	97.0
7	Illinois Hybrid 200.....	54.3	17.4	100	104.9	99.0	97.0
9	Illinois Hybrid 805.....	53.6	17.6	91	95.5	95.7	95.7
10	Sibley Farms Hybrid 753B.....	52.0	18.9	91	95.5	93.6	92.9
11	U. S. Hybrid 5.....	51.4	16.8	100	104.9	95.1	91.8
12	● Station Yellow Dent.....	41.5	18.7	89	93.4	78.9	74.1
	Average.....	56.0	17.5	95.3	....	....	....

bana, where the average of all entries was 36.2 bushels above the yield of Station Yellow Dent and the average yield of the five best hybrids was 44 bushels above the same variety.

Five-year records of two hybrids. Representative of a large group of hybrids that are particularly adapted to highly fertile soils is U. S. 5 (WF9 x 38-11) (R4 x 317), for which a five-year average is given in Table 31, page 219. On the high-fertility area this hybrid has produced 18 bushels (or 20 percent) more than the open-pollinated variety. On the low-fertility area it yielded only 7 bushels, or 15 percent, more. In physical characteristics (which are very important in

Table 31.—SOIL ADAPTATION TESTS: Five-year Summary of Yields at Sibley and Urbana

Entry	Soil of <i>high</i> productivity		Soil of <i>low</i> productivity	
	Acre yield	Increase over open-pollinated	Acre yield	Increase over open-pollinated
	<i>bu.</i>	<i>bu.</i>	<i>bu.</i>	<i>bu.</i>
U. S. Hybrid 5 ¹ (WF9 x 38-11) (R4 x L317)	87	18	46	7
Illinois Hybrid 960 (R4 x Hy) (701 x L317)	86	17	53	14
Station Yellow Dent	69	...	39	...

¹U. S. Hybrid 5 was tested as Illinois 139 in 1936 and in 1937 as a coded commercial hybrid.

determining the adaptability of a hybrid) this hybrid has demonstrated¹ that it has excellent stalk characteristics when grown on fertile soil and very undesirable ear and kernel characteristics when grown on poor soil.

Likewise Illinois 960 (R4 x Hy) (701 x 317) illustrates the performance of the more widely adapted hybrids, which normally do relatively better on medium to poor soils than on good soils. Since this hybrid yields well on good soils as well as on the medium to poor soils it might be concluded that it would, in general, be the more desirable of these two hybrids, but it has very decided stalk weakness that is greatly emphasized on fertile soil¹ even tho it shows very desirable ear and kernel characteristics when grown on poor soil.

SUMMARY

1. The average yield of corn on the twelve fields in the Illinois corn-performance tests in 1940 was 72.1 bushels an acre, which is 28.1 bushels more than the average for the state. During the seven years (1934-1940) over which these tests have been conducted, the average yields on the test fields have exceeded the average yields of the state by 111, 94, 79, 64, 47, 53, and 64 percent respectively.

2. The range in average yield of sound corn on the twelve testing fields was from 25.1 bushels at Shobonier to 92.4 bushels at Kings.

3. The five best hybrids on all twelve fields yielded an average of 27.4 bushels of sound corn an acre more than the five open-pollinated varieties. They also exceeded the open-pollinated varieties in lodging resistance, having 13.4 more erect plants per hundred.

4. On the Kings, Greenfield, Paxton, and Cambridge fields the five best hybrids exceeded the five open-pollinated varieties in yield of sound corn by 50.4, 42.6, 40.8, and 37.9 bushels an acre respectively.

5. On every test field the five best hybrids exceeded the five open-pollinated varieties in yield of sound corn and in percentage of erect plants.

¹See illustrations in Bulletins 450 and 463 of this Station.

6. Except on the Littleton field, the five poorest hybrids in the tests averaged more bushels of sound corn per acre than the open-pollinated varieties.

7. On six of the twelve testing fields all the hybrids exceeded the average of the open-pollinated varieties in performance rating. On the other six fields a total of only 10 hybrids had a lower performance rating than the average of the open-pollinated varieties.

8. Data obtained from the Round Lake and Kings fields indicate that after an early killing frost most hybrids dry out faster than the open-pollinated varieties.

9. Compared with the open-pollinated varieties, the hybrid entries have, on the average, improved thru the years of these tests in yield of sound corn but not in lodging resistance. The average superiority of the hybrids over the open-pollinated varieties was 12.8 bushels an acre for the entries included in the four-year tests, 14.4 bushels for the entries in the three-year tests, and 16.1 bushels in the two-year tests; whereas in erect plants per hundred the average superiority of the hybrids was 14.6, 12.9, and 13.6 for the entries in the four-, three-, and two-year tests.

10. Several insects caused damage to the Illinois corn crop in 1940, but the corn rootworm and the southern corn rootworm were the only ones to cause visible damage on the testing fields and this occurred only on the Cambridge and Albion fields.

11. No advance toward better ear-rot resistance appears to have been made in most of the hybrids that are now in general commercial production. Diplodia ear rot caused much damage on the Kings and Round Lake fields. Fusarium ear rot was prevalent thruout Illinois. Smut caused more damage than usual.

12. In the soil-adaptation tests at Sibley and Urbana hybrids grown on a good soil and under a good soil management responded better to such conditions than did the open-pollinated variety. At Urbana the five best hybrids yielded 23.3 bushels an acre more on the high-fertility area than on the poorer fields. The open-pollinated variety, however, yielded half a bushel less on the better field than on the poorer field.

Hybrids normally ranking high on poor soils ranked high in all the soil-adaptation tests this year, and hybrids normally high on good soils ranked low in all tests.

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